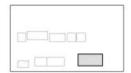
# AUDIO UNIT CONNECTOR A (24P)



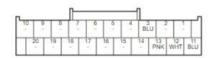


### Wire side of female terminals

| Cavity | Terminal Name   | Description                                     | Voltage (about)                               | Symptom  |
|--------|-----------------|---|---|--|
| A1     | GND             | Ground for audio unit (G404)                    | Vehicle in ACCESSORY mode:<br>Less than 0.2 V | If open: Audio unit screen goes black<br>(backlight still operates). Audio system<br>does not work.  |
|        |                 |   |   | If short to ground: No effect on system.   |
| A2     | Not used        |   | , = <u>-949-1</u> 71                          | 2002 2009  |
| А3     | + B BACKUP MAIN | Continuous power source                         | Battery voltage                               | If open: Audio unit screen goes black.<br>Audio system does not work.<br>If short to ground: Blows the No. B21   |
|        |                 |   |   | (15 A) fuse in the under-hood fuse/relay box.  |
| A4     | Not used        |   | <u> </u>                                      |  |
| A5     | RL SPKR+        | Outputs sound signal for left rear speaker      | 1   | 2018 1275  |
| A6     | RL SPKR-        | Outputs sound signal for left rear speaker      | 1 1-1-1-1                                     | 1. Section 1975  |
| A7     | Not used        | <del></del>                                     | (2 <del>-333-</del> 3                         |  |
| A8     | Not used        |   | ( <del></del>                                 | Yes New  |
| A9     | RR SPKR+        | Outputs sound signal for right rear speaker     | # <u>1920_</u> #                              | 1 <u>0.00 10.00</u>  |
| A10    | RR SPKR-        | Outputs sound signal for right rear speaker     | e <del>- 600 -</del> 60                       | 5016 305)  |
| A11    | REMOTE SW GND   | Audio remote switch ground                      | Vehicle in ACCESSORY mode:<br>Less than 0.2 V | in-ia  |
| A12    | Not used        |   | 1   | 1 (100 to 100 to |
| A13    | K LINE          | Detects scan tool signal (serial data)          | *   | - Company of the Comp |
| A14    | Not used        |   | 5-30-3  |  |
| A15    | FL SPKR+        | Outputs sound signal for left front speakers    | 9 <u>4119907</u> 19                           | 7 <u>000 1000</u>  |
| A16    | FL SPKR-        | Outputs sound signal for left front speakers    | , F <u></u>                                   | <u> 2012 200</u>   |
| A17    | Not used        |   | (2 <del>-12/-</del> %)                        | 1000 1000  |
| A18    | Not used        |   | " semester si                                 | Total State  |
| A19    | FR SPKR+        | Outputs sound signal for right front speakers   |   |  |
| A20    | FR SPKR-        | Outputs sound signal for right front speakers   | (   | Marie Marie  |
| A21    | Not used        | <u> </u>  | , = <u></u>                                   |  |
| A22    | AUDIO REMOTE SW | Detects control signal from audio remote switch | Vehicle in ACCESSORY mode:<br>2.5 V - 2.9 V   | ( <del></del>  |
| A23    | DISPLAY SW      | Detects control signal from audio remote switch | Vehicle in ACCESSORY mode:<br>2.5 V - 2.9 V   | 5-31-3-30  |
| A24    | ACC             | Power source for accessories                    | Vehicle in ACCESSORY mode:<br>Battery voltage | If open: Audio unit screen goes black.<br>Audio system does not work.  |
|        |                 |   |   | If short to ground: Blows the No. C37<br>(7.5 A) fuse in the under-dash<br>fuse/relay box.   |

### AUDIO UNIT CONNECTOR B (20P)





Wire side of female terminals

| Cavity     | Terminal Name        | Description                            | Voltage (about)  | Symptom  |
|------------|----------------------|--|--|--|
| B1         | Not used             |  | F_22_0   | V-10 - 10 - 10 - 10 - 10 - 10 - 10 - 10                        |
| B2         | Not used             |  |  |  |
| B3         | B-CAN_L              | Communication signal                   | 1.———1   | If open/short to ground: System Links<br>B-CAN icon shows red. |
| B4         | Not used             |  | 1 1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1  | Acces deser  |
| B5         | Not used             |  | 0  |  |
| B6         | Not used             |  | P-22-3   | <u> </u>   |
| B7         | Not used             |  | N-1009-19  | (Ca.1) (Ca.1)  |
| B8         | Not used             |  | 0 <del>-0-0</del> 0  | ( <del></del>  |
| B9         | Not used             |  | 1 a <del>-a-a</del>  | 1000 Table 1   |
| B10        | Not used             |  | ( <del></del> )  | <del></del>  |
| B11        | PARKING BRAKE SW     | Detects parking brake switch on signal | Vehicle in ACCESSORY mode, parking brake switch is applied: Less than 0.2 V  Vehicle in ACCESSORY mode, parking brake switch is not applied: 3.3 V |  |
| B12        | HFT/NAVI REMOTE SW   | Detects control signal from HFL switch | Vehicle in ACCESSORY mode:<br>2.5 V - 2.9 V  | J. 100 100   |
| B13        | B-CAN_H              | Communication signal                   | 6 <del>-333-</del> 8   | If open/short to ground: System Links<br>B-CAN icon shows red. |
| B14        | Not used             |  | <u> </u>   | <u> </u>   |
| B15<br>B16 | Not used<br>Not used | ===                                    |  |  |
| B17        | Not used             | D                                      |  | ( <del></del>  |
| B18        | Not used             |  |  | ·——  |
| B19        | Not used             | <u> </u>                               | <u> </u>   | ·  |
| B20        | Not used             | (2)(-10)                               |  | R0000  |

#### AUDIO UNIT CONNECTOR C (24P)





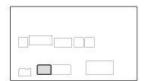
Wire side of female terminals

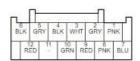
\*: With LaneWatch

| Cavity | Terminal Name | Description   | Voltage (about)  | Symptom  |
|--------|---------------|---|--|--|
| C1     | F-CAN_L       | Communication signal  |  | If open/short to ground: System Links F-CAN icon shows red.        |
| C2     | SH CAMERA     | Shield for terminals No. 3, No. 4, No. 15, and No. 16             |  | ( <del></del>  |
| C3     | CAMERA V GND  | Ground for video signal   | Vehicle in ACCESSORY mode:<br>Less than 0.2 V  | N <del></del>  |
| C4     | RC GND        | Ground for rear view camera for power source                      | Vehicle in ACCESSORY mode:<br>Less than 0.2 V  | -  |
| C5     | CAMERA BIT0   | Mode select signal for rearview camera                            | 0 V or 5 V - 8 V (depends on rearview mode)  | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1                              |
| C6*    | LANEWATCH SW  | LaneWatch on/off signal from LaneWatch switch                     | Vehicle in ACCESSORY mode,<br>LaneWatch switch is pressed:<br>Less than 0.2 V<br>Vehicle in ACCESSORY mode,<br>LaneWatch switch is released:<br>3.3 V  |  |
| C7     | BACK LT       | Detects reverse signal of select lever from reverse relay circuit | Vehicle in ON mode,<br>transmission is shifted to R<br>position/mode: Battery voltage<br>Vehicle in ON mode,<br>transmission is shifted to any<br>position/mode other than R<br>position/mode Less than 0.2 V  |  |
| C8°    | LWC CAM VGND  | Ground for LaneWatch camera                                       |  | <u> </u>   |
| C9°    | SH LWC CAM    | Shield for terminals No. 8, No. 20, No. 21, No. 22, and No. 23    |  | 10 <del></del>   |
| C10    | Not used      |   |  |  |
| C11    | Not used      |   |  | ( <del></del>  |
| C12    | Not used      |   |  |  |
| C13    | F-CAN_H       | Communication signal  | TOTAL STATE OF THE | If open/short to ground: System Links F-CAN icon shows red.        |
| C14    | Not used      | <u> </u>  |  | ( <u></u>  |
| C15    | CAMERA V      | Video signal for rearview camera                                  | <del></del>  | ( <del></del>  |
| C16    | RC VCC        | Power source for rearview camera                                  | Vehicle in ACCESSORY mode:<br>8 V  |  |
| C17    | Not used      | ^ <del></del>   |  | 1 <del></del>  |
| C18    | CAMERA BIT1   | Mode select signal for rearview camera                            | 0 V or 5 V - 8 V (depends on rearview mode)  | 8 <del></del>  |
| C19    | CAMERA ADPT   | Detects connection for rearview camera                            | Less than 0.2 V  | If open: System Links Rear Wide<br>Camera icon shows red.          |
| C20*   | LWC CAM VID   | Video signal for LaneWatch camera                                 | Total Control of the  | ·  |
| C21*   | LWC CAM VCC   | Power source for LaneWatch camera                                 | Vehicle in ACCESSORY mode:<br>8 V  | ( <u></u>  |
| C22*   | UNIT TO LWC   | Communication signal for LaneWatch camera                         |  | If open/short to ground: System Links<br>LaneWatch icon shows red. |
| C23*   | LWC TO UNIT   | Communication signal for LaneWatch camera                         |  | If open/short to ground: System Links<br>LaneWatch icon shows red. |
| C24    | Not used      | <u>5-87 (842)</u>   |  | ( <u></u>  |

<sup>\*:</sup> With LaneWatch

# AUDIO-NAVIGATION UNIT CONNECTOR D (12P)

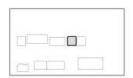


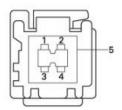


Wire side of female terminals

| Cavity | Terminal Name | Description   | Voltage (about)  | Symptom   |
|--------|---------------|---|--|---|
| D1     | GA BUS-       | GA-Net bus communication signal                         |  | If open/short to ground: System Links<br>XM icon shows red.   |
| D2     | SH GA BUS     | Shield for terminals No. 1 and No. 7                    | 9 <del>_94</del>   |   |
| D3     | GA AUDIO L-   | Inputs sound signal from XM receiver                    | 0_22_0   | 7 <u>00, 100</u>  |
| D4     | GA AUDIO R-   | Inputs sound signal from XM receiver                    | ( <del></del>  |   |
| D5     | SH GA AUDIO   | Shield for terminals No. 3, No. 4, No. 9, and No. 10    |  |   |
| D6     | GA GND        | GA-Net related units ground                             | Vehicle in ACCESSORY mode:<br>Less than 0.2 V  | If open: System Links XM icon shows red.  |
| D7     | GA BUS+       | GA-Net bus communication signal                         |  | If open/short to ground: System Links<br>XM icon shows red.   |
| D8     | GA SYS ON     | Output signal for GA-Net related units switching on/off | Vehicle in ACCESSORY mode:<br>Less than 0.2 V<br>Vehicle in OFF (LOCK) mode:<br>3.3 V - Battery voltage (depends<br>on connected slave unit) | If open: System Links XM icon shows red.  |
| D9     | GA AUDIO L+   | Inputs sound signal from XM receiver                    | 2 <del>-22-</del> 4  | 3 No. 10 |
| D10    | GA AUDIO R+   | Inputs sound signal from XM receiver                    | ( <del></del>  | 3 <del>-10-10-1</del>   |
| D11    | Not used      |   | (1 <del>-170)-</del> (1  | ( <del></del>   |
| D12    | GA+B          | Outputs power source for GA-Net related units           | Battery voltage  | If open/short to ground: System Links<br>XM icon shows red.   |

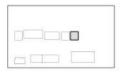
# AUDIO UNIT CONNECTOR F (5P)

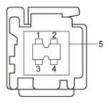




Terminal side of female terminals

| Cavity | Terminal Name | Description   | Voltage (about)        | Symptom  |
|--------|---------------|---|------------------------|--|
| F1     | USB1 GND      | Ground for communication signal                     |                        | (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)  |
| F2     | USB1 VBUS     | Outputs power source for USB port A                 | 1222-023               | (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)  |
| F3     | USB1 DATA+    | Communication signal                                | (1 <u>000</u>          | 100000000000000000000000000000000000000  |
| F4     | USB1 DATA-    | Communication signal                                | ( <del>100-100</del> ) |  |
| F5     | USB1 SH       | Shield for terminals No. 1, No. 2, No. 3, and No. 4 | ( <del>100 30</del> )  | Description of the Control of the Co |

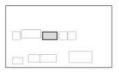


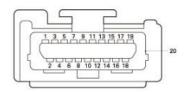


Terminal side of female terminals

| Cavity | Terminal Name | Description   | Voltage (about) | Symptom       |
|--------|---------------|---|-----------------|---------------|
| G1     | USB2 GND      | Ground for communication signal                     |                 |               |
| G2     | USB2 VBUS     | Outputs power source for USB port B                 |                 | ( <u> </u>    |
| G3     | USB2 DATA+    | Communication signal                                |                 |               |
| G4     | USB2 DATA-    | Communication signal                                | (100) (00)      | Name and Add  |
| G5     | USB2 SH       | Shield for terminals No. 1, No. 2, No. 3, and No. 4 | (-10-24)        | 3 <del></del> |

### AUDIO UNIT CONNENTOR H (20P)

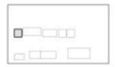




Terminal side of female terminals

| Cavity | Terminal Name         | Description                            | Voltage (about)   | Symptom                |
|--------|-----------------------|--|---|------------------------|
| H1     | T.M.D.S DATA2+        | Inputs video/audio data signal         |   |                        |
| H2     | T.M.D.S DATA2 SHIELD  | Shield for terminals No. 1 and No. 3   | 1 (2 <del>1 (2 )   1 (2 )</del> (2 )  |                        |
| H3     | T.M.D.S DATA2-        | Inputs video/audio data signal         | <u> </u>  |                        |
| H4     | T.M.D.S DATA1+        | Inputs video/audio data signal         |   | ( <u>1000-000</u> )    |
| H5     | T.M.D.S DATA1 SHIELD  | Shield for terminals No. 4 and No. 6   | J460-1601   |                        |
| H6     | T.M.D.S DATA1-        | Inputs video/audio data signal         | (1 <u>0000_4000</u> )   | 0.885-0.55             |
| H7     | T.M.D.S DATA0+        | Inputs video/audio data signal         | ( <del>100-00</del> )   |                        |
| H8     | T.M.D.S DATA 0 SHIELD | Shield for terminals No. 7 and No. 9   | ( <del>-10-10</del> )   | D <del></del>          |
| H9     | T.M.D.S DATA0-        | Inputs video/audio data signal         | ( <del>10 - 10 )</del>  | 3 <del>-2-3-</del>     |
| H10    | T.M.D.S CLOCK+        | TMDS synchronous signal                | ( <del></del>   | V <del>ast total</del> |
| H11    | T.M.D.S CLOCK SHIELD  | Shield for terminals No. 10 and No. 12 | - I   |                        |
| H12    | T.M.D.S CLOCK-        | TMDS synchronous signal                | 13  |                        |
| H13    | CEC                   | HDMI control signal                    | A No. of Contract |                        |
| H14    | UTILITY               | Not used                               | <u> </u>  |                        |
| H15    | SCL                   | I2C bus synchronous signal             | <u> </u>  | <u> 8-22 - 522</u>     |
| H16    | SDA                   | I2C bus communication signal           | J-22-32%  | N <u>. 19 - 1919</u>   |
| H17    | DDC,CEC GROUND        | Ground for HDMI control signal         | 1-200_MM00  | 0887-088               |
| H18    | + 5V POWER            | 5 V power supply                       | ( <del>100 - 100</del> )  |                        |
| H19    | HOT PLUG DETECT       | Detects connection signal              | (100-00)  |                        |
| H20    | SHIELD                | Shield for all of terminals            | ( <del>100 - 100</del> )  |                        |

### AUDIO UNIT CONNECTOR J (2P)





Terminal side of female terminals

| Cavity | Terminal Name | Description | Voltage (about) | Symptom  |
|--------|---------------|-------------|-----------------|--|
| J1     | GPS           |             |                 | If open/short to ground: System Links<br>GPS antenna icon shows red. |
| J2     | SH (GPS)      |             |                 | If open: System Links GPS antenna icon shows red.                    |