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SECTION 2. NAME OF EACH PART
SECTION 3. OVERALL BLOCK DIAGRAM
SECTION 4. EXPLODED VIEWS
SECTION 5. FRONT PART
SECTION 6. MAIN PART
SECTION 7. AUDIO PART
SECTION 8. TROUBLESHOOTING GUIDE
# SPECIFICATION

## GENERAL
- **Output Power:** Digital Output (S/PDIF)
- **Power Source:** DC 14.4 V
- **Ground System:** Negative
- **Dimensions (W x H x D):** 262.5 x 177.75 x 223.9 mm
- **Net Weight:** 2.6 kg

## DISPLAY
- **LCD:** 17.78 cm (7 inch) TFT LCD
- **Resolution:** 800 X 480
- **Back Light:** LED Type

## CD SECTION
- **Frequency Response:** 20 Hz to 20 kHz
- **S/N Ratio:** 70 dB
- **Distortion:** 0.3%
- **Channel Separation (1 kHz):** 60 dB

## RADIO SECTION
### FM
- **Frequency Range:** 87.5 to 108 MHz
- **S/N Ratio:** 50 dB
- **Distortion:** 1%
- **Usable Sensitivity:** 12 dBµV

### AM (MW)
- **Frequency Range:** 522 to 1620 kHz
- **S/N Ratio:** 45 dB
- **Distortion:** 1.0%
- **Usable Sensitivity:** 35 dBµV
SECTION 2. NAME OF EACH PART

[CONTENTS]

• CONTROL PANEL ................................................................. 2-1
• STEERING WHEEL REMOTE CONTROL .................................... 2-2
CONTROL PANEL

1. Disc slot
   Press to eject a disc from the unit.

2. Eject (▲)
   Press to eject a disc from the unit.

3. CD indicator light (CD-IN)
   When a disc is inserted, the indicator is illuminated.

4. LCD
   Touch to operate.

5. PHONE ( muster)
   Press to operate Bluetooth HandsFree function.

6. RADIO
   Press to select FM/AM band.

7. Left knob (/ )
   - Press: power on/off
   - Turn: volume control

8. MEDIA
   Press to select a source: CD/USB/iPod/BT/AUX

9. Display on/off ( )
   Press to switch between the display on and off.

10. ▲/▼
    • Press to:
      - Automatic tuning: RADIO
      - Track up/down: CD/iPod/USB/BT
    • Press and hold to:
      - Search (FF/REW): CD/iPod/USB/BT

11. NAV
    Press to enter destination menu.
    Various methods for entering a destination are available.

12. MAP
    Press to display the map.

13. Right knob ( )
    Rotate it clockwise/counterclockwise.
    • Searches the previous or next radio frequency.
    - Manual tuning
    • Skips a track/file up/down in all list screen.
    • ZOOM IN/ZOOM OUT
      - Rotate to change the map scale on the map screen.

    Repeat voice guidance ( )
    Push to repeat the last guidance advice when guidance is active.

14. Info ( )
    Press to view the destination, route, and traffic information.
    • Destination: shows the information of current vehicle position and destination.
    • Route: shows the route information.
    • Traffic: shows the traffic information.
      - Traffic info on route: the list of traffic information on active route.
      - Traffic info nearby: the list of traffic information around the current vehicle position.

15. SETUP ( )
    • Press to access system settings.
    • Press and hold to check the device ID, the software version, the navigation version, and the map version.

16. Clock ( )
    • Press to display the digital/analog clock and outside temperature in both power on/off status.
    • Press and hold to display to the [Clock] menu.
1. MODE
Press to select a source.
FM → AM → CD → USB (or iPod) → BT
→ AUX → FM...

2. Volume (↑/+/↓/-)
Increases or decreases the volume level.

3. ▲/▼
• Press to:
  - Automatic tuning: RADIO
  - Track up/down: USB CD iPod BT
• Press and hold to:
  - Manual tuning: RADIO
  - Search (FF/REW): USB CD iPod BT

4. ✪
• Press to activate voice recognition mode.
• Press once more to cancel voice recognition.

5. ✈
Press to operate Bluetooth HandsFree function.
• Press to accept a call.
• Press to make a call from last calls.
• Press and hold to switch the sound path
during a call.
  (Hands free ↔ phone)

6. ☑
Press to hang up a call.
SECTION 3. OVERALL BLOCK DIAGRAM

[CONTENTS]

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SECTION 4. EXPLODED VIEWS

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CABINET AND MAIN FRAME PART
SECTION 5. FRONT PART

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MAIN PRINTED CIRCUIT BOARD (TOP VIEW)
MAIN PRINTED CIRCUIT BOARD (BOTTOM VIEW)
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### A. POWER & SIGNAL CONNECTOR

**KET MG644408 (42PIN)**

<table>
<thead>
<tr>
<th>NUMBER</th>
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<th>NUMBER</th>
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<td>A12</td>
<td>BATT_B+</td>
<td>A15</td>
<td>AUTO_LIGHT</td>
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<td>A11</td>
<td>ACC</td>
<td>A14</td>
<td>MM_CAN_L</td>
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<td>AUX_L</td>
<td>A13</td>
<td>HS_CAN_L</td>
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<td>NAVI_VOICE+</td>
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<td>NAVI_VOICE-</td>
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<tr>
<td>A7</td>
<td>ILL+</td>
<td>B7</td>
<td>REVERSE_GEAR</td>
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<tr>
<td>A6</td>
<td>ILL-</td>
<td>B6</td>
<td>SPDIF+</td>
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<td>SPDIF_GND</td>
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<td>N.C (N.America AVN : GND)</td>
<td>B4</td>
<td>Front Left -</td>
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<td>A3</td>
<td>DOOR_UNLOCK</td>
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<td>Front Right +</td>
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<td>A2</td>
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<td>Front Left +</td>
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<td>AUX_CVBS_IN</td>
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<td>MIC-</td>
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<td>AUX_VGND</td>
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<td>MIC+</td>
<td>B15</td>
<td>SPDIF-</td>
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<td>AUX_DET</td>
<td>B14</td>
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<td>ALT_IN</td>
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<td>Rear Left -</td>
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<td>A18</td>
<td>REMOTE_ANTENNA</td>
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<td>Rear Left +</td>
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<td>Key_GND</td>
<td>B11</td>
<td>Rear Right -</td>
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<td>A16</td>
<td>PARKING</td>
<td>B10</td>
<td>Rear Right +</td>
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</table>

* North American Optional

### B. CAMERA & TMU CONNECTOR

**TYCO AMP 1318853 (24PIN)**

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<td>CAMERA_CVBS</td>
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<td>10</td>
<td>CAMERA_B+</td>
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<tr>
<td>9</td>
<td>NC</td>
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<tr>
<td>8</td>
<td>NC</td>
</tr>
<tr>
<td>7</td>
<td>NC</td>
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<tr>
<td>6</td>
<td>AUDIO+[ECALL]</td>
</tr>
<tr>
<td>5</td>
<td>TMU_GND</td>
</tr>
<tr>
<td>4</td>
<td>RS422_RX+ TMU</td>
</tr>
<tr>
<td>3</td>
<td>RS422_TX+ TMU</td>
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<tr>
<td>2</td>
<td>RS422_GND</td>
</tr>
<tr>
<td>1</td>
<td>NC</td>
</tr>
<tr>
<td>24</td>
<td>CAMERA_VGND</td>
</tr>
<tr>
<td>23</td>
<td>NC(CAMERA_ON)</td>
</tr>
<tr>
<td>22</td>
<td>CAMERA_PGND</td>
</tr>
<tr>
<td>21</td>
<td>NC</td>
</tr>
<tr>
<td>20</td>
<td>NC</td>
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<td>19</td>
<td>NC</td>
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<tr>
<td>18</td>
<td>AUDIO+[ECALL]</td>
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<tr>
<td>17</td>
<td>NC</td>
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<tr>
<td>16</td>
<td>RS422_RX- TMU</td>
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<td>15</td>
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<tr>
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<td>NC</td>
</tr>
</tbody>
</table>

* North American Optional
AUDIO PRINTED CIRCUIT BOARD (TOP VIEW)
AUDIO PRINTED CIRCUIT BOARD (BOTTOM VIEW)
SECTION 8. TROUBLESHOOTING GUIDE

[CONTENTS]

• GENERAL PART (NAVIGATION) ................................................................. 8-1
GENERAL PART (NAVIGATION)

Cannot identify current location. (GPS not receiving)
GPS cannot be used indoors and must be connected to a power source with ACC in a vehicle in a location where the signal from the satellite can be received easily.
When initially connecting the GPS, it usually takes about 10 minutes to be working normally, but the connection speed can differ depending on the weather condition and surrounding obstacles.
If the GPS connection is unstable for a long period of time, try the following.
• Check if the product is connected to a power source.
• Check if the back of the GPS product is in a location where the sky can be seen well.
• If there are high buildings or if you are under a tree, move to a location where there are no obstacles.

Cannot hear the voice guide.
The volume is not set correctly or turned off. Adjust the volume of voice guidance.

There is a difference between the driving road and the road on the map in the product.
Even though GPS is usually very accurate, there is a small margin for error.
When the GPS receiver is installed, there can be an error of about 10m. But for newly built roads, the problem could come from the data update to the map.

Cannot see the map.
Perhaps you cannot see the map even when you have executed the navigation menu.
This happens when the data within the memory is damaged. Delete all the data in the memory and install the data again. If the issue persists after installation, contact the A/S center.

The path guide is different from the actual path (path guide error)
• When the road is closely parallel.
• When the splitting road angle is very small.
• When there is an adjacent road when turning.
• When driving on a road that is narrowing fast.
• When driving through mountains or where the road is too curvy.
• When the starting, passing and arriving locations are too close within 1km.
• When you have set the starting, passing, or arriving locations more than 1km away from the road.
• When driving through tunnels.
**Map matching**
As mentioned, the GPS systems used by this Navigation System are susceptible to certain errors. Their calculations may on occasion place you to a location on the map where no road exists. In this situation, the processing system understands that vehicles travel only on roads, and is able to correct your position by adjusting it to a nearby road. This is called map matching.

![Map matching.](image)

**How to update the navigation map and software**
To update the navigation map and software, visit the site (http://www.navigation.com/hyundai).

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Cause</th>
<th>Correction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power does not turn on.</td>
<td>• The ignition switch is NOT turned ON.</td>
<td>• Turn the ignition switch to ON.</td>
</tr>
<tr>
<td></td>
<td>• The ignition switch is NOT set to ACC.</td>
<td>• Set the ignition switch to ACC.</td>
</tr>
<tr>
<td></td>
<td>• The power of the unit is turned OFF.</td>
<td>• Turn the unit on by pressing POWER on the control panel.</td>
</tr>
<tr>
<td></td>
<td>• Noise and other factors are causing the built-in microprocessor to operate incorrectly.</td>
<td>• Turn the unit off and then on.</td>
</tr>
<tr>
<td>Playback is not possible.</td>
<td>• The disc is dirty.</td>
<td>• Clean disc.</td>
</tr>
<tr>
<td></td>
<td>• The loaded disc is a type this unit cannot play.</td>
<td>• Check the type of the disc.</td>
</tr>
<tr>
<td></td>
<td>• The disc is inserted upside down.</td>
<td>• Insert the disc with the label upward.</td>
</tr>
<tr>
<td></td>
<td>• The files on the disc are an irregular file format.</td>
<td>• Check the file format.</td>
</tr>
<tr>
<td>There is no sound.</td>
<td>• The volume level is low.</td>
<td>• Adjust the volume.</td>
</tr>
<tr>
<td></td>
<td>• The mute is on.</td>
<td>• Turn the mute off.</td>
</tr>
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## Trouble Shooting Guide

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<th>Symptom</th>
<th>Correction</th>
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<tbody>
<tr>
<td>1</td>
<td>The Screen is White. Case1) 1) It is partially white screen. 2) All Button is working.</td>
<td>Replace Front Assy's</td>
</tr>
<tr>
<td>2</td>
<td>The Screen is White. Case2) 1) It is completely white screen. 2) All Button is not working.</td>
<td>Replace Main BD</td>
</tr>
<tr>
<td>3</td>
<td>CD Deck is not Working. 1) No play CD 2) No insert CD</td>
<td>Replace CD Deck</td>
</tr>
<tr>
<td>4</td>
<td>No Sound First, Check as below. 1) Check CD Sound 2) Check Radio Sound</td>
<td>Replace Audio BD</td>
</tr>
</tbody>
</table>