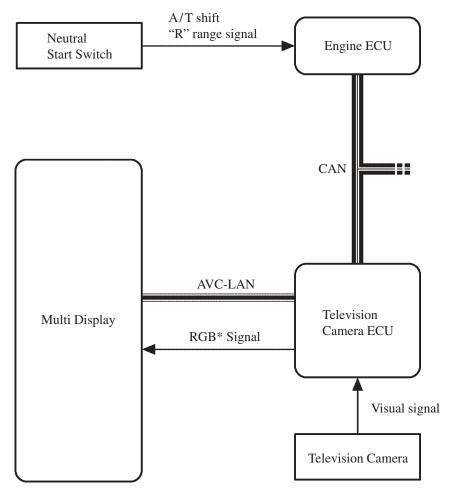
## 2. Rear View Monitor

## General

- A set consisting of the rear view monitor system and the multi display is available as an option.
- To assist the driver in parking the vehicle by monitoring the rear view, this system has a television camera mounted on the luggage compartment door to display the rear view of the vehicle on the multi display.
- This system consists of the television camera, television camera ECU and multi display.

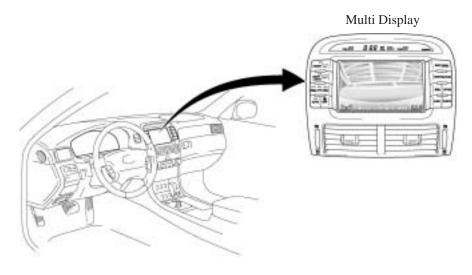
# **▶** System Diagram **◄**

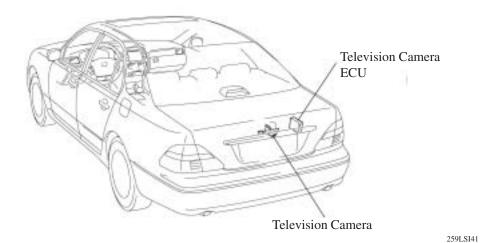


\*RGB: Red, Green, Blue

259LSI20

# **Layout of Main Component**





# **Function of Main Component**

Item	Function	
Television Camera	<ul> <li>Mounted on the luggage compartment door to transmit the view from the rear of the vehicle to the television camera ECU.</li> <li>A color video camera that uses a CCD (Charge Coupled Device and a wide-angle lens)</li> </ul>	
Television Camera ECU	<ul> <li>Transmits video signals, which contain a composite of view from the rear of the vehicle taken with the television camera and the warning message, to the multi display.</li> <li>Television camera ECU effects control of the system by receiving the signal from the neutral start switch.</li> </ul>	
Multi Display	Receives video signals containing a composite of the view from the rear of the vehicle and the warning message from the television camera ECU, and displays on the multi display.	
Neutral Start Switch	Transmits a reverse shift position signal to the television camera ECU.	

## **Operation**

## 1) General

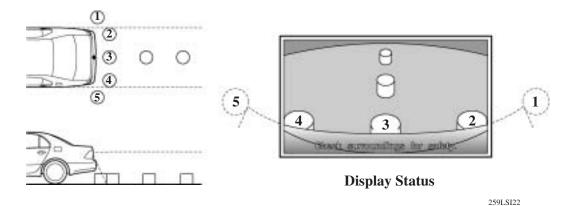
With the ignition switch ON, if the driver shifts the shift lever to reverse, the display of the multi display switches to operate this system. In this state, if the driver moves the shift lever to a position other than reverse, or switches the modes on the multi display, the rear view display stops and switches to the display of another mode.

#### **CAUTION**

- Do not rely entirely on the rear view monitor system. Use caution, just as you would when backing up any vehicle.
- Never back up while looking only at the screen. The image on the screen may differ from actual conditions. If you back up while looking only at the screen, you may hit a vehicle or have an unexpected accident. When backing up, be sure to check visually behind and all around the vehicle, both directly and with mirrors, before proceeding.

## 2) Area Displayed on Screen

- On the multi display, objects on the right of the vehicle appear on the right side of the display panel, and objects on the left of the vehicle appear on the left side of the display panel.
- The television camera uses a wide-angle lens. The perceived distance from images that appear on the screen differs from the actual distance.



## **NOTE:**

- Area displayed on screen may vary according to vehicle status or road conditions.
- The area covered by the television camera is limited. The television camera does not show objects close to either corner of the bumper or under bumper.

#### 3) Fail Safe

The table below indicates the conditions of detecting malfunctions in this system.

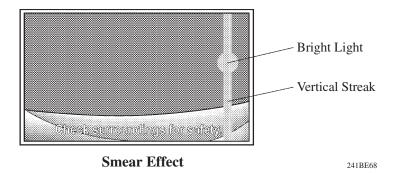
Malfunction Parts	Detection Item	Function
Television Camera	Transmission of television camera malfunction signal	Stops signal reception and displays a dark screen.
Television Camera ECU	Malfunction of television camera ECU unit	Stops system operation

# 4) Self-Diagnosis Function

- The rear view monitor system is equipped with a self-diagnosis system and can display the diagnosis menu.
- The method for starting the diagnosis menu screen is the same as in the LEXUS navigation system. For details refer to the LEXUS LS430 Repair Manual Supplement (Pub. No. RM1049E).

## **Precaution for LEXUS Parking Assist System**

- In the following cases, it may become difficult to see the images on the screen, but this is not a malfunction.
  - In the dark (for example, at night)
  - When the temperature near the lens is very high or low
  - When water droplets are adhering to the television camera, or when humidity is high. (for example, when it rains)
  - When foreign matter (for example, mud) is adhering to the television camera lens
  - When the sun or the beam of headlights is shining directly into the television camera lens
- If a bright light (for example, sunlight reflected off the vehicle body) is picked up by the television camera, the smear effect\*, peculiar to the CCD camera, may occur.



#### — REFERENCE —

A phenomenon that occurs when a bright light is picked up by the television camera; when transmitted by the television camera, the light source appears to have a vertical streak above and below it.

<sup>\*:</sup> Smear effect