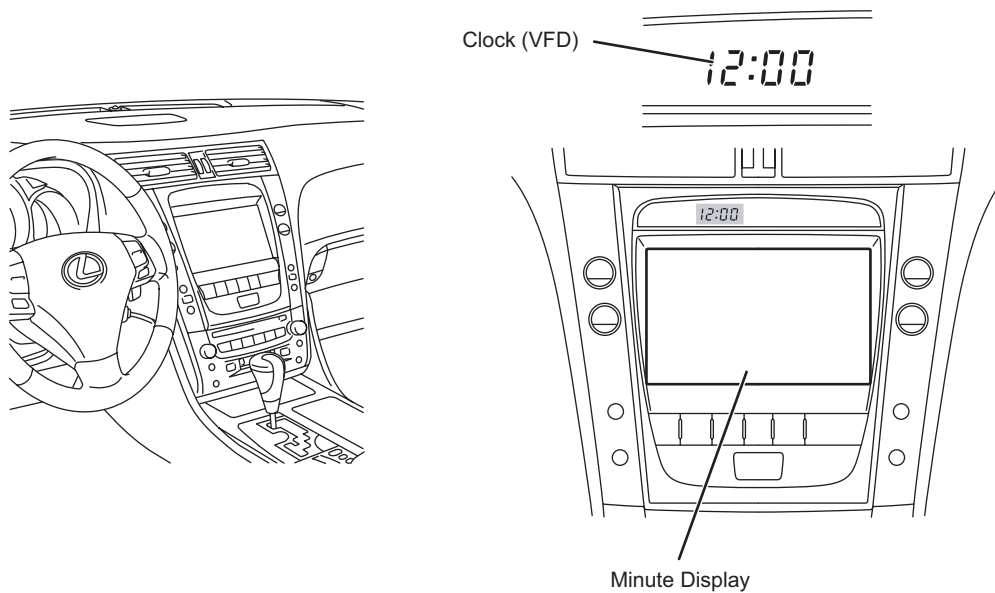


Clock

- A VFD (Vacuum Fluorescent Display) digital clock is provided in the upper area of the multi display. It uses an automatic GPS correction function that receives signals from the GPS satellites to automatically correct the indicated time. A clock correction switch (touch panel) appears in the multi display if the automatic GPS correction function is not being used.

Clock Specifications

Rated Voltage [V]	DC12
Accuracy [sec/day]	-2.0~+6.0sec.(when automatic GPS correction function is not used)
Hour Digit Indication	1~12
Minute Digit Indication	00~59



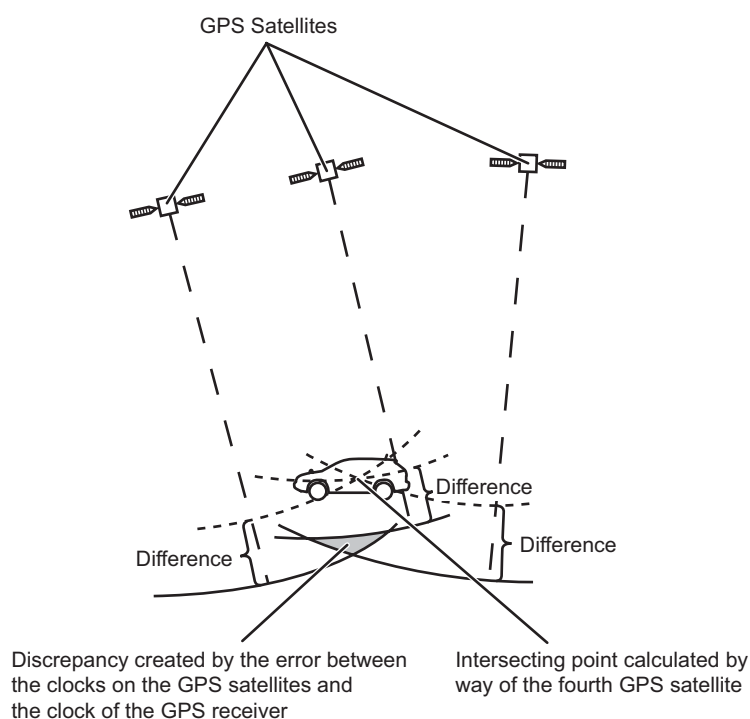
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Clock Setting Switch

- Press the H button of the clock correction switch to correct the hours. Keep this button pressed more than 0.5 seconds to increase the number of hours at 0.5-second intervals.
- Press the M button of the clock correction switch to correct the minutes. Keep this button pressed more than 0.5seconds to increase the number of minutes at 0.5-second intervals.
- Press the rest button on the clock correction switch to reset the data for the minutes and seconds. While the minutes show 30 to 59, press this button to increase the number of hours by 1 hour.
- The clock correction switch is provided with an operating sound for ease of use.

Clock with The GPS Automatic Correction Function(Principle)

- The clock with the automatic GPS correction function, which operates under the principle of trilateration, uses a GPS receiver that is built into the navigation ECU to calculate the signals transmitted by the GPS satellites, in order to constantly indicate accurate time.
- The GPS satellites, which carry high-precision clocks onboard, constantly transmit orbital signals and radiowave transmission time signals. The GPS receiver also has a built-in clock function, which determines the time that the radiowave signals transmitted by the GPS satellites are received. This enables the GPS receiver to measure the length of time taken by the radiowave signals from the GPS satellites to reach the GPS antenna.
- The GPS receiver multiplies the length of time taken by the radiowave signals from the three GPS satellites to reach the GPS antenna by the velocity of light (speed of light transmission: approximately 300,000 km/s). The product of this multiplication is the distance between the GPS satellites and the GPS antenna.
- The positions of the GPS satellites are known by their signals. Therefore, the crossing point of three spheres centered on the three GPS satellites, respectively, is the reception point (position of the driven vehicle). However, because of an error that exists between the clocks on the GPS satellites and the clock on the GPS receiver, the three spheres do not intersect at a single point. For this reason, the GPS receiver uses a fourth GPS satellite and calculates the single point at which the three spheres intersect, in order to correct the time of the GPS receiver clock function. The clock with the automatic GPS correction function receives the input of this information in order to constantly indicate the correct time.



Clock with The GPS Automatic Correction Function(Function)

- On the "Adjust Clock" screen, touch "ON" Auto Adjust to show "Time Zone" on the screen. Touch "Time Zone" to show the offset mode. Use the offset mode to advance or retard the time indicated on the radiowave signal clock (which is corrected automatically in accordance with the standard radiowave signals {standard time} only in the amount of time desired).
- On the "Adjust Clock" screen, touch "OFF" Auto Adjust, to show the clock correction mode on the screen. The clock correction mode enables the manual correction of the clock, in the same way as the ordinary clock, through the operation of the "H", "M", and ":00" switches (of the touch panel).
- To exit "Adjust Clock", touch "OK".

Clock with The GPS Automatic Correction Function(Offset Mode)

- The ordinary clock with the automatic GPS correction function indicates the standard time in synchronization with the standard radio-wave signals. However, by using the offset mode to input time, the user can accordingly retard or advance the indicated time.
- To input offset time, touch "triangle" on the screen. A maximum of 6 hours can be set at either retard or advance.
- The +B power supply for the radiowave signal clock backs up the time that is input during the offset mode. If the +B power supply for the radiowave signal clock is disrupted during an inspection or maintenance service, the clock will revert to the default of "no offset time (0:00)".