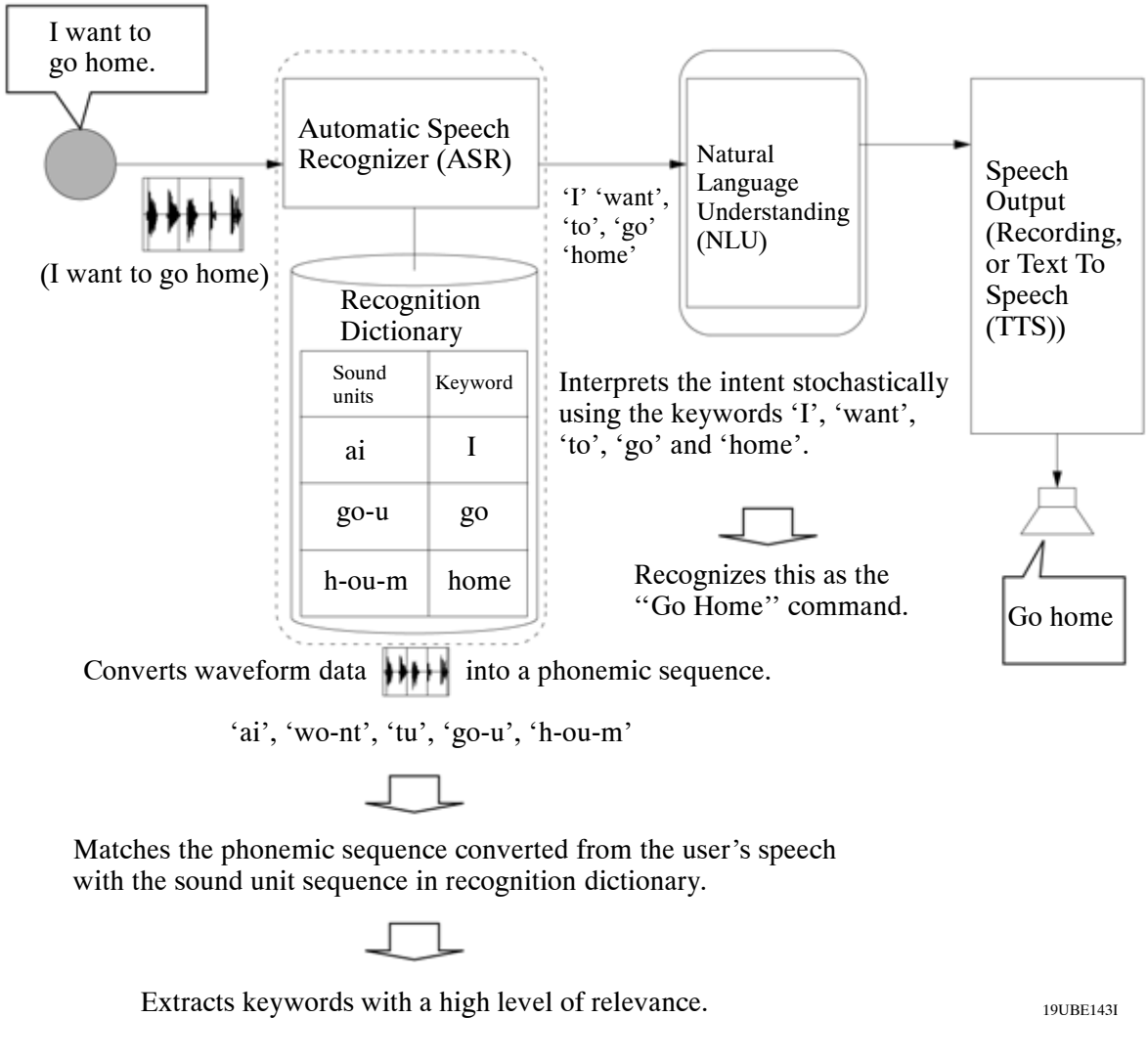
■VOICE RECOGNITION SYSTEM

- When the voice recognition system starts operating, the commands that the system is able to recognize are displayed on the multi display.
- A shortcut menu is provided on the voice recognition command screen, enabling the user to operate the system with fewer voice commands.
- The natural speech technology used for this voice recognition system can recognize a user's natural speech as voice recognition commands ("natural speech" refers to naturally spoken utterances that include several keywords).
- Natural speech technology enhances the usability because the user does not have to memorize voice recognition commands exactly.
- Natural speech technology uses the system's Automatic Speech Recognizer (ASR) and Natural Language Understanding (NLU) to recognize voice recognition commands.
  - The ASR extracts keywords from a user's natural speech using a phonemic sequence (the units of sound that make up a phrase or sentence).
  - The NLU analyzes these extracted keywords based on their probable meaning, interpreting the intent of the user's utterances.

▶ Example of 'I want to go home' ◀



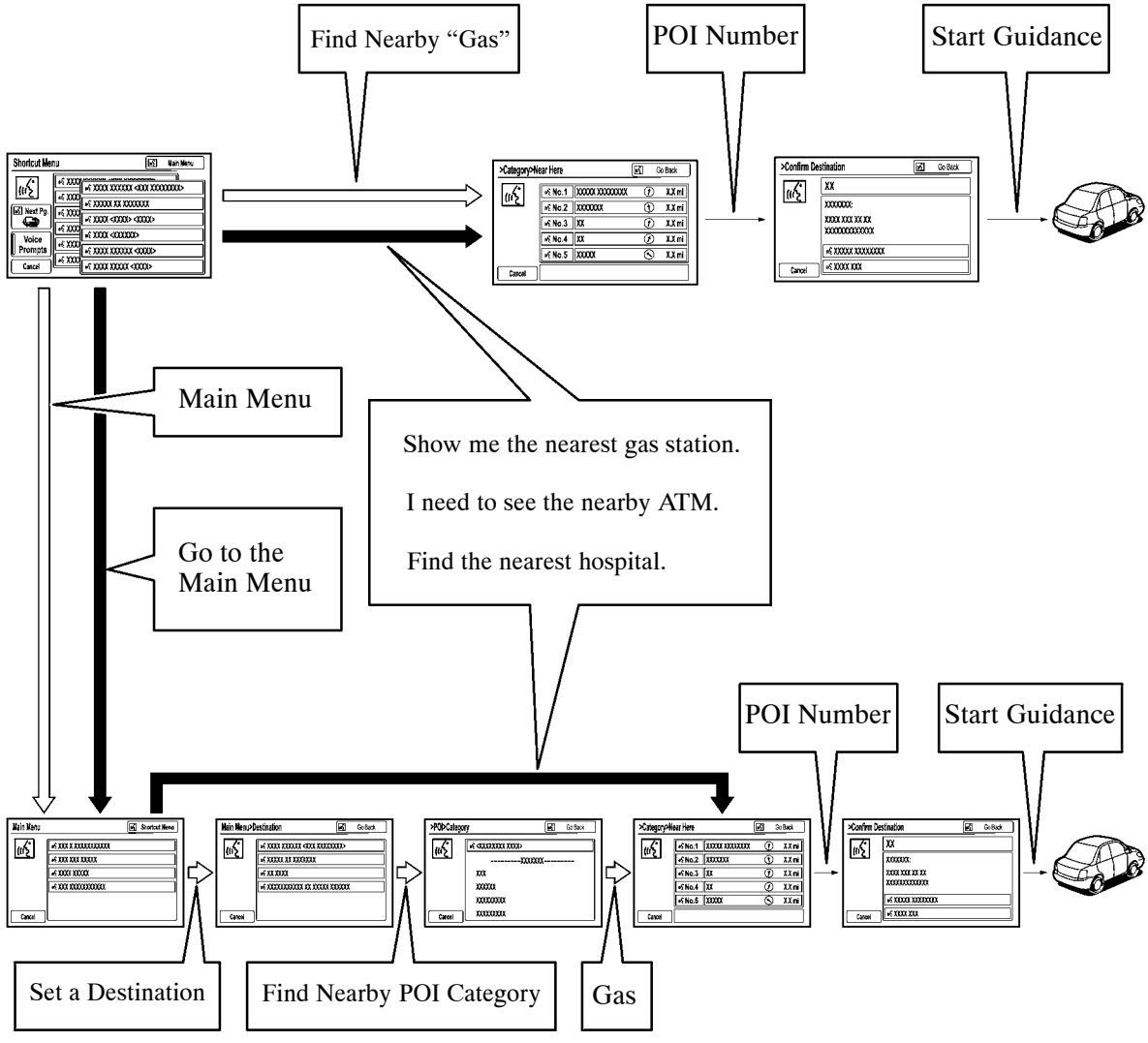
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- In order to interpret the intent of a user's speech, the NLU unit records key words in a data table.
- The data table is organized by task, and the data is used to interpret the probable meaning of the user.
  - Even if the user does not say the indicated voice command ("Go Home"), speech with a similar meaning can be recognized (for example: "Let's go home" and "Take me home").

NOTE:

The natural speech technology used by the voice recognition system does not function in the following cases.
- When the key words used are not in the data table.
- When inputting address elements such as the city name in the address input screen.
- When a phrase includes several intentions (Ex. "Go home... actually, no. I want to call Bob.").
- When spoken instructions are for a level that cannot be recognized by the system. (Ex. When the user attempts to carry out a task from a different level while another task is still in progress, such as trying to make a phone call while the Destination screen is being displayed after giving the 'Destination' command.)

▶ Examples of Spoken Phrases for Destination Screen: ◀

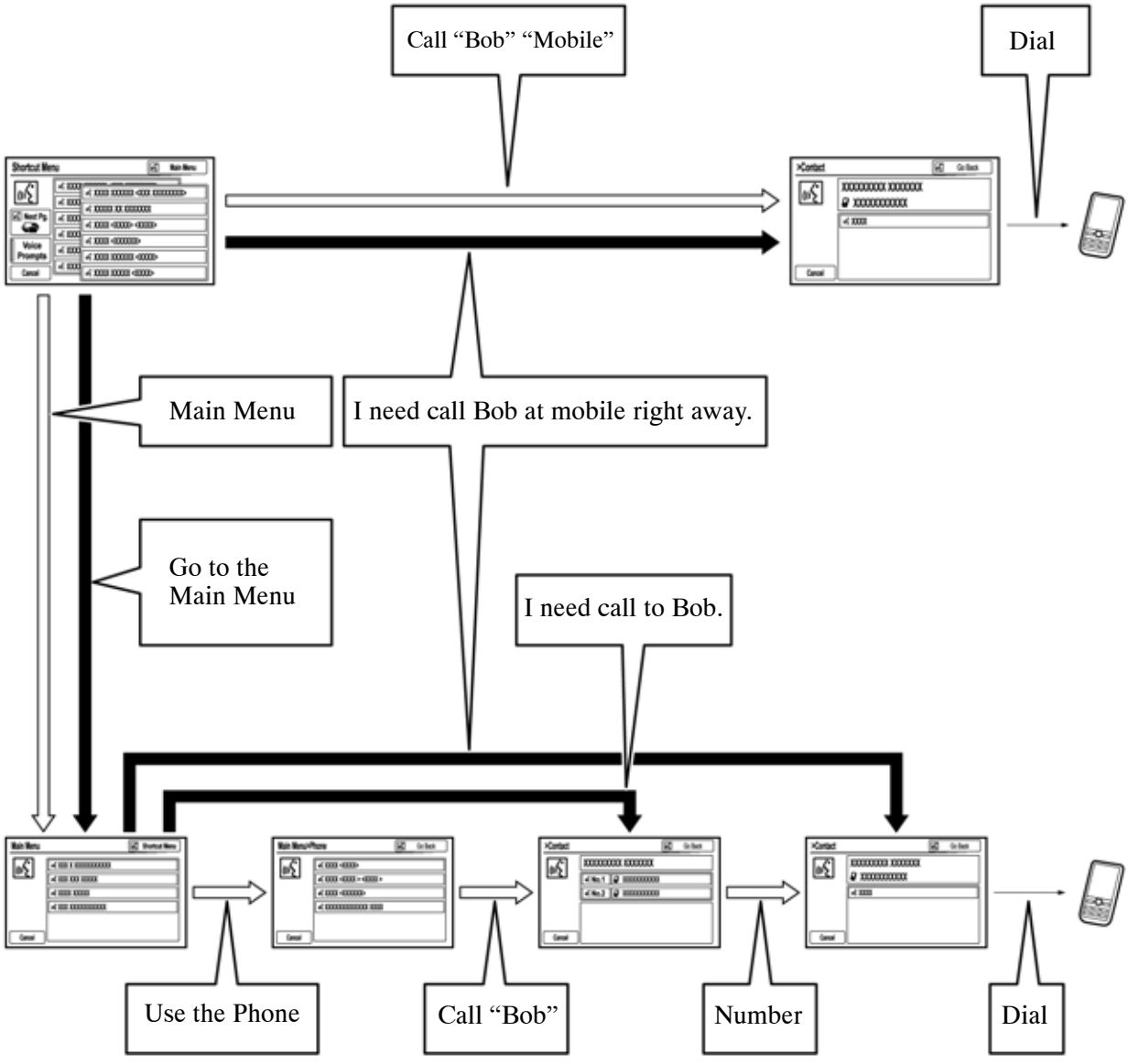


⇨ : Transition when saying speech using the voice commands

➡ : Transition when the natural speech recognition is used

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▶ Examples of Spoken Phrases for Phone Screen (1): ◀



⇨ : Transition when saying speech using the voice commands

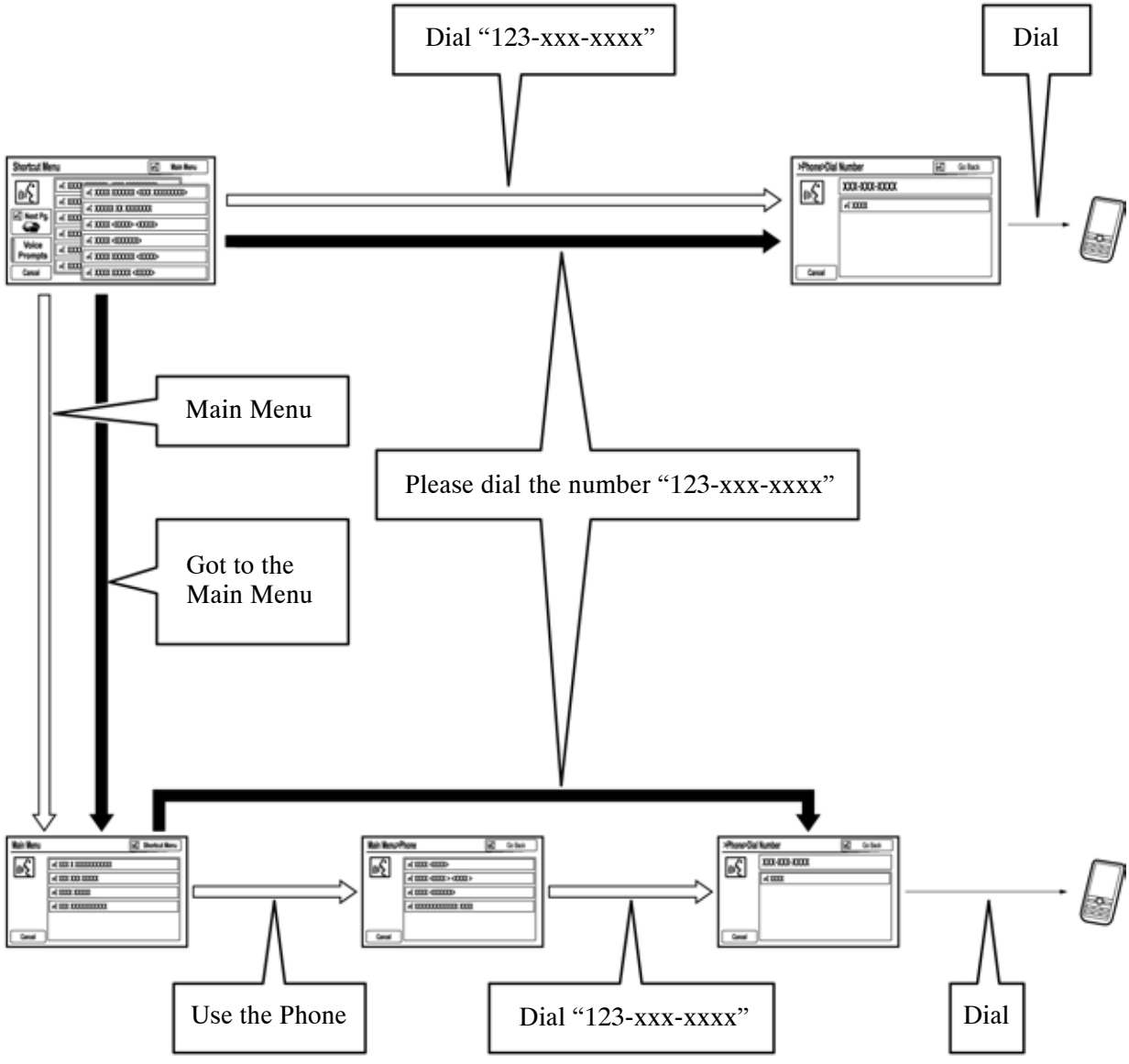
➡ : Transition when the natural speech recognition is used

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*: If the system cannot recognize all the utterances, it changes the screen to the voice recognition command screen that suits the recognized task.

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▶ Examples of Spoken Phrases for Phone Screen (2): ◀



⇨ : Transition when saying speech using the voice commands

➡ : Transition when the natural speech recognition is used

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*: If the system cannot recognize all the utterances, it changes the screen to the voice recognition command screen that suits the recognized task.

■ DIAGNOSIS

For details on the procedure required to enter the Service Menu screen, refer to the Repair Manual.