

VOICE-ACTIVATED AUTOMATIC SELF-FOLDING DINING TABLE

ABSTRACT:

Dining tables take up a lot of space in a room day and night even though they are used only for lunch and dinner. There are some folding dining tables, but it takes a lot of effort to drag the tables, unfold them, and fold them by hand twice a day. What if the table could teleport itself to the middle of space and then unfold itself at your command? The self-folding and unfolding dining table accomplish this action using a twin motor drive, IR Sensors, and dual motor for folding and unfolding. To enable the open and close operation using spoken commands, the system is integrated with a controller-based voice recognition system. The controller mic records and processes the user's command to open the dining table. The mechanism now determines which side to open on by looking for obstructions on both sides. If the user instructed the machine to open the table half, it will only do so on the open side. Upon receiving the command to "open full," the table will automatically open both sides. The table folds to free up room, and the same mechanism is utilized to unfold it and move it back to the wall. The automatic self-folding dining table offers a number of benefits, such as: When not in use, it only takes up one-third of the available area and automatically unfolds upon button press or self-folds. Fully automatic operation, genuinely modern automatic furniture, can move itself to the center of the room before unfolding, detects obstacles before opening for safety.

Keywords: dining table, twin motor drive, IR Sensors, dual motor, voice-recognition system, mic.