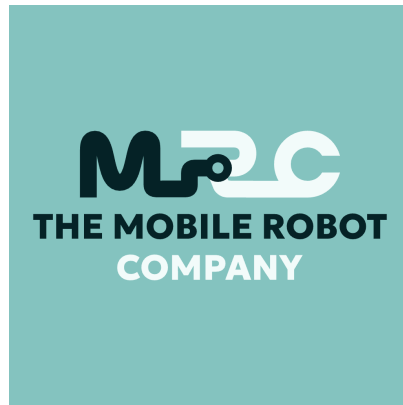




The Mobile Robot Company

Knowledge Center — How It Works · 2026-08-04

<https://info.mobilerobot.com/products/j1600/how-it-works>

How It Works

The J1600's basic workflow is **map by driving, save destinations, pick manually, and deliver autonomously**. This page walks through first-time setup, the delivery workflow, the available [task patterns](https://info.mobilerobot.com/documentation/user-guides/task-management/) (<https://info.mobilerobot.com/documentation/user-guides/task-management/>), and the constraints that apply in autonomous mode.

First-time setup

1. Power on the J1600 and follow the on-screen tutorial.
2. Use the tiller to [drive manually through the facility](https://info.mobilerobot.com/documentation/getting-started/creating-the-first-map/) (<https://info.mobilerobot.com/documentation/getting-started/creating-the-first-map/>). The robot continuously learns and updates its understanding of the environment.
3. Drive to each desired autonomous floor-drop point.
4. Tap **Save location**, name the point, and repeat for all required destinations.

There is no software limit to the number of saved locations; practical limits come from available floor space. The robot maps with [3D LiDAR SLAM](https://info.mobilerobot.com/products/j1600/navigation-and-obstacle-avoidance/) (<https://info.mobilerobot.com/products/j1600/navigation-and-obstacle-avoidance/>) — no fixed tracks, wires, reflectors, or building modifications are needed.

[Training](https://info.mobilerobot.com/documentation/getting-started/operator-training/) (<https://info.mobilerobot.com/documentation/getting-started/operator-training/>) for an existing electric pallet-jack operator takes about 30 minutes, and [typical setup takes hours to one day](https://info.mobilerobot.com/applications/results/faster-deployment/) (<https://info.mobilerobot.com/applications/results/faster-deployment/>) [depending on scope](https://info.mobilerobot.com/applications/planning/deployment-scope-examples/) (<https://info.mobilerobot.com/applications/planning/deployment-scope-examples/>).

Performing a delivery

1. Manually pick up a supported pallet or load carrier (see [Pallet and load compatibility](https://info.mobilerobot.com/products/j1600/pallet-and-load-compatibility/) (<https://info.mobilerobot.com/products/j1600/pallet-and-load-compatibility/>)).
2. Open task creation on the touchscreen.
3. Choose the task type and saved drop destination.
4. Choose what should happen afterward: return to origin, go to another point or parking, or stop and wait.
5. Execute the task.

6. The robot asks to enter automatic mode; confirm with the physical start/go control.
7. The interface instructs you to step away.
8. The J1600 [travels autonomously](https://info.mobilerobot.com/documentation/user-guides/autonomous-operation/) (<https://info.mobilerobot.com/documentation/user-guides/autonomous-operation/>), avoids obstacles, drops the pallet at floor level, and follows the selected post-delivery action.

Task patterns

- **Boomerang** (<https://info.mobilerobot.com/applications/scenarios/deliver-and-return/>): deliver to a destination and return to the origin/operator.
- **Simple ABC** (<https://info.mobilerobot.com/applications/scenarios/a-to-b-to-c-transport/>): deliver from A to B, then travel to C.
- **Come to me** (<https://info.mobilerobot.com/applications/scenarios/come-to-me/>): call the robot to a location from a mobile app or web interface — an advanced automation function.
- **Drop and wait** (<https://info.mobilerobot.com/applications/scenarios/deliver-and-wait/>): deliver, drop, and remain at the destination.
- **Deliver and park** (<https://info.mobilerobot.com/applications/scenarios/deliver-and-park/>): complete the drop and proceed to a defined parking location.
- **Multi-point to multi-point** (<https://info.mobilerobot.com/applications/use-cases/multi-point-pallet-transport/>): combine saved points for [cross-docking](https://info.mobilerobot.com/applications/use-cases/cross-docking/) (<https://info.mobilerobot.com/applications/use-cases/cross-docking/>) and changing flows.

The most commonly performed task is [manual pickup, autonomous delivery](https://info.mobilerobot.com/applications/scenarios/manual-pickup-and-autonomous-delivery/) (<https://info.mobilerobot.com/applications/scenarios/manual-pickup-and-autonomous-delivery/>), floor-level drop, and return to origin. The route can be a few meters or more than 100 meters — the concept is the same.

Location model

Locations are [created by driving to a point and tapping Save location](https://info.mobilerobot.com/documentation/getting-started/saving-the-first-location/) (<https://info.mobilerobot.com/documentation/getting-started/saving-the-first-location/>). Saved points can be recombined freely: you do not need to demonstrate every possible A-to-B variation. Adding a new [drop point](https://info.mobilerobot.com/documentation/installation/mapping-and-drop-point-setup/) (<https://info.mobilerobot.com/documentation/installation/mapping-and-drop-point-setup/>) takes minutes.

Control and task ownership

Tasks are always initiated by a person (<https://info.mobilerobot.com/documentation/user-guides/operator-manual/>), and pallet pickup is always manual. You can take over immediately at any time by grabbing or moving the tiller or by using the stop and override controls. A [three-position key switch](https://info.mobilerobot.com/safety-compliance/safety-functions/mode-selection/) (<https://info.mobilerobot.com/safety-compliance/safety-functions/mode-selection/>) selects power-off, manual-only, or automatic mode. White lights indicate manual mode; blue floor lights show the protected area in automatic mode. The handover between modes is described in detail on [Dual mode](https://info.mobilerobot.com/products/j1600/dual-mode/) (<https://info.mobilerobot.com/products/j1600/dual-mode/>).

Constraints in autonomous mode

- Pallet pickup is always manual.
- Automatic pallet delivery is at floor level; the up-to-1,600 mm lift height is a [manual capability](https://info.mobilerobot.com/documentation/user-guides/manual-operation/) (<https://info.mobilerobot.com/documentation/user-guides/manual-operation/>).
- Autonomous mode requires level floors — automatic gradeability is 0%.
- Loads must fit the envelope on [Pallet and load compatibility](https://info.mobilerobot.com/products/j1600/pallet-and-load-compatibility/) (<https://info.mobilerobot.com/products/j1600/pallet-and-load-compatibility/>), and the site must meet the [operating environment requirements](https://info.mobilerobot.com/products/j1600/operating-environment/) (<https://info.mobilerobot.com/products/j1600/operating-environment/>).

Demonstrated in practice

At [TEST CAMP INTRALOGISTICS 2026](https://info.mobilerobot.com/newsroom/events/test-camp/) (<https://info.mobilerobot.com/newsroom/events/test-camp/>), [a first-time user who had used electric pallet jacks — but never the J1600](https://info.mobilerobot.com/applications/customer-stories/video-case-stories/) (<https://info.mobilerobot.com/applications/customer-stories/video-case-stories/>) — drove it manually, saved a location, created a drop-and-return task, confirmed automatic mode, and watched the robot route around people using its 3D environment map. In a separate demonstration, a location named "Pallet Bay 1" was created and the robot instructed to drop and wait. [Hands-on demonstrations](https://info.mobilerobot.com/products/buying-and-deployment/request-a-demonstration/) (<https://info.mobilerobot.com/products/buying-and-deployment/request-a-demonstration/>) typically get a first-time visitor to launch an autonomous task within roughly 15 minutes.

Related pages

- [Dual mode](https://info.mobilerobot.com/products/j1600/dual-mode/) (https://info.mobilerobot.com/products/j1600/dual-mode/) — the manual/autonomous split and the handover.
- [Navigation and obstacle avoidance](https://info.mobilerobot.com/products/j1600/navigation-and-obstacle-avoidance/) (https://info.mobilerobot.com/products/j1600/navigation-and-obstacle-avoidance/) — how mapping and routing work.
- [Software and integrations](https://info.mobilerobot.com/products/j1600/software-and-integrations/) (https://info.mobilerobot.com/products/j1600/software-and-integrations/) — Standard and Advanced software capabilities.
- [Human-in-the-loop automation](https://info.mobilerobot.com/documentation/concepts/human-in-the-loop-automation/) (https://info.mobilerobot.com/documentation/concepts/human-in-the-loop-automation/) — the philosophy behind operator-initiated tasks.