



The Mobile Robot Company

Knowledge Center — Manual Pickup and Autonomous Delivery · 2026-08-04

<https://info.mobilerobot.com/applications/scenarios/manual-pickup-and-autonomous-delivery>

Manual Pickup and Autonomous Delivery

Every J1600 task follows the same core pattern: a person picks up the pallet manually, and the robot delivers it autonomously. Pickup is always manual — that is where judgment lives — and autonomous delivery is always at floor level. This page walks through the pattern that every other scenario builds on.

The workflow

1. Manually pick up a supported pallet or load carrier, [using the tiller](https://info.mobilerobot.com/documentation/user-guides/manual-operation/) (<https://info.mobilerobot.com/documentation/user-guides/manual-operation/>), like a conventional electric pallet jack.
2. Open task creation on the 15-inch touchscreen.
3. Choose the task type and the saved drop destination.
4. Choose what happens after delivery: 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](https://info.mobilerobot.com/safety-compliance/safety-overview/manual-and-autonomous-mode-safety/) (<https://info.mobilerobot.com/safety-compliance/safety-overview/manual-and-autonomous-mode-safety/>); confirm with the physical LED start/resume button.
7. The interface instructs you to step away. Do so.
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.

The route can be a few meters or well over 100 meters — the concept is identical.

Mode indication and control

- White lights indicate manual mode; in automatic mode, blue light strips display the protected area around the vehicle.
- 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.
- Grab or move the tiller at any time to take back manual control immediately. Emergency-stop buttons and the tiller-position switches stop the vehicle — see

[how J1600 safety works](https://info.mobilerobot.com/safety-compliance/safety-overview/how-j1600-safety-works/) (<https://info.mobilerobot.com/safety-compliance/safety-overview/how-j1600-safety-works/>).

Why pickup stays manual

Fork placement, load stability, pallet condition, and tight approaches are judgment work. Keeping them manual is what lets the J1600 skip the integration, infrastructure, and controlled processes that full automation needs — the reasoning behind [dual mode](https://info.mobilerobot.com/products/j1600/dual-mode/) (<https://info.mobilerobot.com/products/j1600/dual-mode/>) and [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/>). Loads that need extra care get the treatment in [Sensitive or Unstable Loads](https://info.mobilerobot.com/applications/use-cases/sensitive-or-unstable-loads/) (<https://info.mobilerobot.com/applications/use-cases/sensitive-or-unstable-loads/>).

How quickly a new operator learns this

[Training](https://info.mobilerobot.com/documentation/getting-started/operator-training/) (<https://info.mobilerobot.com/documentation/getting-started/operator-training/>) takes about 30 minutes for someone who already operates an electric pallet jack. At a public test event, [a first-time user drove the J1600 manually](https://info.mobilerobot.com/applications/customer-stories/video-case-stories/) (<https://info.mobilerobot.com/applications/customer-stories/video-case-stories/>), saved a location, created a drop-and-return task, confirmed automatic mode, and watched the robot navigate around people — on first contact with the machine.

Variations on the pattern

The post-delivery choice in step 4 is what differentiates the [named task patterns](https://info.mobilerobot.com/documentation/user-guides/task-management/) (<https://info.mobilerobot.com/documentation/user-guides/task-management/>):

- [Deliver and Return](https://info.mobilerobot.com/applications/scenarios/deliver-and-return/) (<https://info.mobilerobot.com/applications/scenarios/deliver-and-return/>) — the most common task
- [Deliver and Wait](https://info.mobilerobot.com/applications/scenarios/deliver-and-wait/) (<https://info.mobilerobot.com/applications/scenarios/deliver-and-wait/>)
- [Deliver and Park](https://info.mobilerobot.com/applications/scenarios/deliver-and-park/) (<https://info.mobilerobot.com/applications/scenarios/deliver-and-park/>)
- [A-to-B-to-C Transport](https://info.mobilerobot.com/applications/scenarios/a-to-b-to-c-transport/) (<https://info.mobilerobot.com/applications/scenarios/a-to-b-to-c-transport/>)
- [Come-to-Me](https://info.mobilerobot.com/applications/scenarios/come-to-me/) (<https://info.mobilerobot.com/applications/scenarios/come-to-me/>) — the robot comes to you first

Destinations are created as described in [Temporary Location Setup](https://info.mobilerobot.com/applications/scenarios/temporary-location-setup/) (<https://info.mobilerobot.com/applications/scenarios/temporary-location-setup/>). For the machine's full capabilities, see the [J1600 overview](https://info.mobilerobot.com/products/j1600/overview/) (<https://info.mobilerobot.com/products/j1600/overview/>).