



The Mobile Robot Company

Knowledge Center — Interface Specifications · 2026-08-04

<https://info.mobilerobot.com/documentation/technical-reference/interface-specifications>

Interface Specifications

Reference for every interface on the J1600: the controls an operator uses, the indicators the machine presents, the charging interface, and the [software interfaces available for integration](https://info.mobilerobot.com/documentation/technical-integration/integration-overview/) (<https://info.mobilerobot.com/documentation/technical-integration/integration-overview/>).

Operator controls

Control	Function
15-inch multi-touch HMI	Task creation, saved locations, tutorials, and the Help/Support menu
LED start/resume button	Physical confirmation and execution of automatic tasks
Three-position key switch	Selects power off, manual-only, or automatic mode
Tiller	Manual driving and lift control, as on a conventional electric pallet jack
Tiller-position switches	One switch for emergency stop, one for manual control — grabbing or moving the tiller enables immediate manual takeover
Emergency-stop buttons	Three, positioned on the vehicle
Belly button	Stop-and-reverse protection at the tiller

The operator must [confirm entry into automatic mode](https://info.mobilerobot.com/documentation/getting-started/manual-and-autonomous-modes/) (<https://info.mobilerobot.com/documentation/getting-started/manual-and-autonomous-modes/>), on the physical start/resume button, and the interface instructs the operator to step away before the robot starts.

Indicators and feedback

Indicator	Meaning
Blue light strips (three)	Display the current protective field/safety zone in automatic mode; the field expands with speed
Floor-indicator lights	Show automatic-mode status on the floor around the vehicle
White light indication	Manual mode
Audio speaker	Audible signals and instructions

Charging interface

The vehicle carries charging plates for the optional [automatic charger](https://info.mobilerobot.com/products/chargers-and-accessories/automatic-charger/) (<https://info.mobilerobot.com/products/chargers-and-accessories/automatic-charger/>): the robot positions itself at the station and the charger's interface extends to the plates. [Manual charging](https://info.mobilerobot.com/products/chargers-and-accessories/manual-charger/) (<https://info.mobilerobot.com/products/chargers-and-accessories/manual-charger/>) uses a plug-in charger. See [electrical specifications](https://info.mobilerobot.com/documentation/technical-reference/electrical-specifications/) (<https://info.mobilerobot.com/documentation/technical-reference/electrical-specifications/>).

Support interface

The HMI's Help/Support menu provides a QR code through which technical requests can be sent directly from the machine.

Software and integration interfaces

Interface	Purpose	Availability
VDA 5050 (https://info.mobilerobot.com/documentation/technical-integration/vda-5050-documentation/)	Multi-vendor fleet interoperability	Advanced software
REST API (https://info.mobilerobot.com/documentation/technical-integration/rest-api-documentation/)	Integration with other software and equipment	Advanced software
Fleet Manager (https://info.mobilerobot.com/documentation/technical-integration/fleet-manager-guide/)	Orchestrated multi-robot deployments	Per-robot license
Wi-Fi	Optional; required only for connected functions such as come-to-me	All units

Related reference

- [Product data sheets](https://info.mobilerobot.com/documentation/technical-reference/product-data-sheets/) (<https://info.mobilerobot.com/documentation/technical-reference/product-data-sheets/>) — the consolidated specification summary.
- [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/>) — the safety architecture behind the controls and fields.