

Solar Trax 824 Revision 2

Designed for a Three-Man Crew



Patent Pending

Does Not Require "Operator Only" Worker

Primarily push-button controls, allowing the workers to focus on installing the panels, while the machinery precisely positions the panels in place.

Solar panel installation robot is the first robot in the field installing solar panels. This is not a concept or a research project. This is an actual working robot in the field today!

The **Solar Trax 824** will lift panels 8' high and traverse 24' to handle most Solar Field designs. The base machine is track driven, providing the highest degree of traction and terrainability. Designed for rough terrains and increased slopes, the upper assembly will automatically level itself for increased stability and ease of panel placement.



All hydraulic functions include **Programmed Motion** which combines multiple steps, such as "Raise-Left," which raises the panels from the center position, trolleys sideways to the support frame and lowers it in place. Similar functions include "Home," which returns the tray to the center position for reload and "Drive-Increment," which drives the machine forward the exact distance for installation of the next 4 panels.

Incorporating Vision systems from the autonomous vehicle industry allows for precisely locating the solar panels onto the mounting structure.

The **Pallet Management Vehicle (PMV)** is used to bridge from current technology with 30 panel pallets located every 50' to a delivery vehicle that retrieves the panels autonomously. Therefore, it can be used seamlessly with the current worker-based installations to reduce worker fatigue and increase throughput. The PMV is tethered to the base machine. It lifts and tilts a pallet up to 3000 lbs. and is self-propelled. The top of the PMV is a landing support for the tray where panels are easily loaded.



Other Features Include:

- Deutz Diesel 2.9L Tier 4 Final 49HP (Most functions run at idle for quiet operation)
- 7500 Watt Generator (Charging of tools, lighting package for night operation)
- Sturdy Fork Pockets for Pick and Move
- Trolley Boom Stow Function (Boom hydraulically rotates 90 degrees for shipping)
- Mechanical Panel Tray (No suction cups prone to problems in outdoor environment)

By streamlining and simplifying the solar field installation process, The Solar Trax 824 is destined to greatly advance the solar energy industry.

Specifications:

