

MIRAI

Hand-Eye Coordination
For Industrial Robots

Tackle Variance in Production

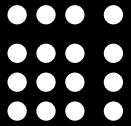


Meet the MIRAI System

Micropsi Industries' MIRAI is a vision-based robot control system that enables industrial robots to deal with variance in position, shape, or movement. Using machine learning, MIRAI generates robot movements in real-time, as opposed to executing actions that must conform to a highly controlled, highly modeled environment.

Deploy MIRAI in assembly, quality inspection, machine tending, contour following, or other applications. MIRAI may be used for multiple steps within a task. It can also be flexibly retrained for new tasks. Skills are not programmed but trained through human demonstration in a few days — no knowledge of programming or AI necessary.

MIRAI Benefits



Variance Handling

Industrial robots with MIRAI are able to deal with variance in a workspace, performing tasks that would be very hard or impossible to hand-engineer.



Application Flexibility

Because MIRAI-enabled robots are able to learn many tasks, they can be trained and retrained for various process steps.



Cost Effectiveness

MIRAI is a cost-effective solution for highly complex tasks. Expensive, special-purpose systems are not necessary anymore.



Easy Deployment

Customers can quickly and easily train or retrain robot movements by themselves in just a few days. No knowledge of programming or AI is required.





How Does It Work?

MIRAI augments the robot's native controller, enabling machines to perceive their work environment. Through AI, MIRAI-enabled robots observe actions performed by a human operator and then imitate those actions. Observations are recorded by a camera attached to the robot's wrist and/or situated at a fixed position proximate to the workspace. To train the robot, a human user performs and records repeated demonstrations of a task by manually guiding the robot by the robot's wrist. The recordings are then transformed into a vision-based, real-time robot control schema.

MIRAI Application Areas

Assembly



Handling



Machine Tending



Quality Inspection



Dispensing



Other



ABB Compatible

UNIVERSAL ROBOTS+ Certified

MIRAI Package

- 1 x MIRAI ux-1 robot controller
- 1 x L-mount for controller box
- 1 x universal AC power supply DC19V/120W
- 1 x AC power cord for EU and US region
- 2 x wireless antennas
- 1 x Ximea xiQ USB3 camera
- 1 x USB3 cable
- 2 x Fujinon lenses
- 2 x Camera fixtures for UR robot arms
- 4 x mounting screws for camera fixture
- 1 x USB pendrive with MIRAI URCaps plugin and product documentation



WATCH DEMONSTRATIONS OF THE MIRAI SYSTEM ON [YOUTUBE](#)

Technical Details

Compatibility:
Universal Robots and ABB

Certifications and standards:
CE, FCC, RoHS

Dimensions:
MIRAI controller box (210mm x 177mm x 45mm)

License type:
One-time purchase or monthly payments

Get in Touch

Want to try the MIRAI system for free?
Want to discuss your automation tasks with an expert? Get in touch:

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