Science Park
The High Tech Incubator
Graz

AplusB

ACADEMIA PLUS

Reefmaster

Reefmaster is developing a fully automated aquarium build on an intelligent, AI-driven system where all kinds of corals can thrive, grow and reproduce.

Our system comprises two products, both of which can be used individually and are in many ways superior to the competition.

A control unit combines all of the necessary water filters and is able to control wave pumps, lights, feeding interval, temperature, etc. In addition, the control unit contains a camera above the aquarium that detects coral growth using machine learning. Coral growth is the most important parameter to identify the health of the corals.

A pipet robot (with the brand name "Piper") measures all relevant water values fully automatically. Since it uses a camera with AI and reagents (instead of probes), it is maintenance-free and reliable.

Because the AI operates the aquarium and autonomously reacts to problems that arise, this has the advantage for the user that he/she can leave the aquarium alone for a longer period of time. Many aquarists are out on business or go on vacation for one to several weeks. Finding a representative who is competent and reliably knows what to do in the event of a technical problem is often difficult. Here, the Reefmaster enables the user to be absent for up to three weeks. The app informs about when the next action is due. For example, it the automatic feeder must be refilled in five days, the user can do it right away and stay away for longer.

Team Reefmaster

Reefmaster Piper 2

Contact: Stefan Kofler (stefan.kofler@reefmaster.tech)

Website: https://reefmaster.tech