# Liquinetics

Noval's Liquinetic product line is a Rebinder application focused on art and utility. Creating simple or complex shapes on demand, Liquinetics have a wide variety of civilian applications.

Designed for consumer use in YE 42. Civilian products containing Rebinder will often use the Liquinetic brand.



| Designer: | Noval Luxury Engineering |
|---|---|
| Manufacturer: | Noval Heavy Industries |
| Availability: | Any |

## History

The development of Rebinder sparked a design craze at Noval. Interestingly, it was not the Defense, Space, and Security division that was the most excited about the new development's design applications, but the Luxury Engineering division instead. The material's ability to dynamically change shape and its glossy, metallic appearance greatly appealed to the designers' love of aesthetic and form.

Soon, Rebinder had been applied to projects of all kinds. The most striking were the art installations: shifting statues, simulated water, trees that seemed to change seasons every few minutes, and more. The best and most commercially-viable of these were developed as individual products and prepared for sale.

# Function and Design

Liquinetics are an application of Rebinder and follow its usual command-and-control pattern. Designs are loaded into a civilian-grade controller during the manufacturing process. In most cases, a simple control interface that features timing commands, design selection, on/off, and other standard commands is installed in the base of the Liquinetic product.

Depending on the specific application, Liquinetics may make use of a variety of support structures. For example - a statue may have a thin body of rods and servos that act as support for the liquid metal. These are not noticeable during normal operation.

Similarly, additional control systems may be installed to make the Liquinetic installation more interactive. Touch detection, proximity sensors, and so on are all potential additions to a Liquinetic product.

## Appearance

Liquinetics are made of Rebinder, a glossy metallic liquid with a thick paint-like consistency in its dormant state. It has small black flecks suspended within it. While the default color of Rebinder is a mercury-like silver, Liquinetics customers can purchase it tinted to appear as another metal.

The specific appearance of a Liquinetic product varies greatly depending on form factor, intended application, and user preference.

## Safety Measures

Consumer safety has been taken very seriously during the design of Liquinetics. For most Liquinetic products, it is not possible for consumers to load new shapes or animations once the product has been sold. A Noval technician can make updates in person by using a highly encrypted, bio-signature signed key. The files within the device are likewise encrypted. A sophisticated checksum and file watcher exists to detect any changes to the Liquinetic's system or shape files.

Additionally, small detection devices have been added to the Rebinder suspension that can detect obstacles during the shape formation process. If someone were to hold their hand in front of a Liquinetic as it attempted to change forms, it would flow harmlessly around the consumer's hand and leave adequate space on all sides to keep the user's comfort and safety assured. If a portion of the shape depends on the blocked area, Liquinetics will delay forming that section until it is safe to do so. In the event that a user's interaction would cause a section of the Liquinetic to lose structural support, that section will immediately liquefy and flow harmlessly around the user's body into the closest available Rebinder.

These safety measure cannot be overridden post-manufacturing and are part of the firmware for the detection devices *and* the controller units.

In short, Noval has taken all available steps to avoid a Liquinetic-related accident, whether it would be caused by a factory-produced model or by a hostile actor attempting to take control of one of the devices.

# Product Variants

Liquinetic is available in a variety of sizes and features. Each comes pre-loaded with a diverse selection of shape options that fits within that factor. Some models may allow user customization post-purchase.

The standard product line is listed below. Custom installations are available upon request.

## Mininetic (10 cm x 10 cm x 15 cm)

An impressive display for any desktop. Pre-loaded designs include a variety of dynamic clocks, historical scenes, kinetic sculptures (including the famous ball clacker), and more. For a personal touch, users can provide portraits or full-size models during purchase to be loaded by a Noval technician.

## Basinetic (50 cm x 50 cm x 1 m)

The perfect statement piece for home or office. Pre-loaded designs include a variety of potted plants, art pieces, water simulations, and more.

## Map Table (1.5m x 1.5m x 50cm)

An interactive map table well-suited for the office or as a command table. Displays topography in excellent detail, including buildings and other surface details. Users can touch a specific location to zoom in or tap the sides of the table to zoom out. Rotation of geography and buildings are also possible by touching the table surface in two locations and moving your hands as though you were holding the section of interest. Larger sizes available upon request.

As this is one of the few Liquinetic installations that allows for user-provided data, a safety agreement must be signed during purchase and a safety confirmation must be clicked at the beginning of each activation. All other safety features remain intact and new design information is encrypted upon entry.

## Wall Panel (10m x 20cm x 3m)

Designed for wall installation, this striking piece of art will catch any visitor's eye. Pre-loaded with a number of landscape scenes, water simulations, and various utility applications.

## Statue (1m x 1m x 2m)

A simple robotic 'skeleton' supports this incredible art piece. A variety of licensed statues and popular figures come pre-loaded. Pre-defined poses for each form are included. Some forms are locked to their original pose due to licensing agreements, but many can be defined by the user. The statue can cycle through multiple pre-set forms and poses.

## Statue (5m x 5m x 10m)

Functions in all ways like the smaller statue version at a larger scale.

## Statue (10m x 10m x 20m)

The basic function of the other statue forms has been expanded upon with additional 'limbs' for the internal skeleton. While this statue is able to support humanoid shapes, it has been explicitly designed

for grand displays such as shifting trees, waterfalls, starships, and more.

## Pathway (3m x 50cm x ?m)

One of the most spectacular implementations of Liquinetics, the Liquinetic Pathway forms itself beneath a user's very feet. The Pathway can follow any path provided it can create support for itself. Steps and slopes are likewise possible. The Pathway can replicate the function of an escalator or elevator, though this complexity is not typically recommended and comes at a greater cost.

Safety rails in front and beside the user are formed as they walk without obstructing the view. If a user attempts to leave the pre-designed pathway by intention or accident, the Liquinetic Pathway will attempt to safely restrict their movement to keep them from coming to harm.

These safety features can be disabled if desired, but require a signed waiver releasing Noval from responsibility should an accident occur.



# Pricing and Availability

The recommended Retail Prices for Liquinetics are below.

| Item | Cost |
|---|---|
| Mininetic (10 cm x 10 cm x 15 cm) | 1000 DS (250 KS) |
| Basinetic (50cm x 50cm x 1m) | 3200 DS (800 KS) |

| Map Table (1.5m x 1.5m x 50cm) | 16,000 DS (4,000 KS) |
| Wall Panel (10m x 20cm x 3m) | 96,000 DS (24,000 KS) |
| Statue (1m x 1m x 2m) | 48,000 DS (12,000 KS) |
| Statue (5m x 5m x 10m) | 126,000 DS (31,500 KS) |
| Statue (10m x 10m x 20m) | 300,000 DS (75,000 KS) |
| Pathway (3m x 50cm x ?m) | 12,000 DS (3,000 KS) / meter |

# OOC Notes

Whisper created this article on 2020/03/13 08:51.

⬜ This article is a work-in-progress. Is it not currently approved.