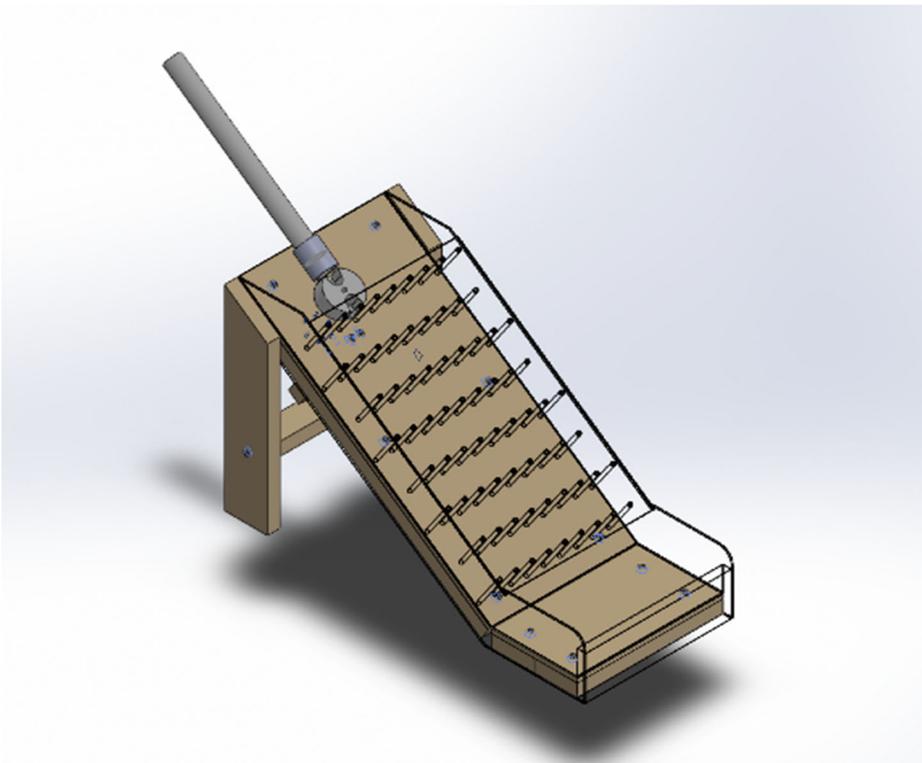


# **USER MANUAL**

## **Marble Mayhem – Accessible Painting with Plinko**



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# OVERVIEW

## INTENDED USE

The goal of this interactive device is to support individuals' efforts to express themselves through painting. The device was designed to be easily accessible for a wide range of individuals with different needs, all while improving the user's control over the art they create. This device is intended to increase the independence of the individuals that are using it.

## OPERATION SUMMARY

To use the device, individuals must load a standard 8.5"x11" piece of paper onto the board by removing the clear acrylic top sheet attached. This paper is the canvas where the medium will be applied. Additionally, individuals must load the PVC pipe with marbles and acrylic paint, and then attach the PVC pipe to the coupling located at the top of the board. To start the painting, an individual must press the push button, which causes the turn key to rotate, pick up a marble, and then release the marble. As the marble rolls down the incline, it interacts with the acrylic dowel rods to randomize movement. When the marbles hit the acrylic dowel rods, it also produces a pinging noise. The marbles then leave trails of paint on the paper as they roll down the incline.

## FEATURES

The **clear acrylic top, sides, & bottom** lead to better visuals and an easy clean up. The **wood structure** is inexpensive and sturdy. The device has **72 staggered acrylic pins** which increase design variability. The **top sheet is attached to the base with Velcro**, which allows easy access to the paper below. A **PVC pipe holds 22 marbles** to help increase the user's independent time. The **turn key has 2 marble slots (180° apart)**, leading to constant marble movement. The **flat area at the bottom** collects the marbles after they've rolled down the incline. The **PowerLink3 Switchbox** increases safety for the user and the **push button** is easy to use and can be switched out for any simple switch.

# HOW TO USE

## SET UP

### ●Step 1 - Connect Wires to the Gear Motor

- I. Plug in the power adapter to the LED connection to connect wires to the power source.
- II. After connecting the adapter, ensure all wires are secure before plugging into the Powerlink3 switchbox.
- III. Plug in the power adapter and switch to the Powerlink3 switchbox.

### ●Step 2 – Add the Paper

- I. Lift off the cover assembly and place an 8.5"x11" piece of paper onto the incline, then put the cover assembly back on with the pins down.

### ●Step 3 – Add Marbles & Paint

- I. Position the turn key to a closed position, blocking the opening to the coupling/PVC pipe.
- II. Mix paint and marbles in a dish, then transfer the marbles into the PVC pipe using a funnel.

## RELEASE

### ●Latched Method

- I. Using the Latched Method:
  - a. The device can be run with a single press of a switch to turn on the device.
  - b. The turn key will then rotate until the button is then pressed again to turn off the device.

### ●Timed Method

- I. Using the Timed Method:
  - a. The Timed Method can be used in either seconds or minutes.
  - b. It is recommended that the seconds function be used for best control.
  - c. The Timed Method will activate the device with the press of the button and will run until the designated set time is up.
  - d. The seconds can be changed with the rotation of the center dial on the Powerlink3 Switchbox.
  - e. The device can then be turned back on with the press of the switch again.

# CARE INSTRUCTIONS

## STORAGE

This device is designed to be stored in any space large enough for the legs and base to sit flat on the ground. The turn key and PVC pipe disconnect for easy storage in a bag or case of the user's choosing. The acrylic sides can be fragile if not stored properly. When storing the device, ensure that there isn't anything pressed against the acrylic sides with large amounts of force. The top acrylic sheet can be stored attached to the device to ensure it does not get misplaced. The adapter can be unplugged from the LED attachment and set inside the base of the device to reduce free wires during storage.

## CLEANING

This device was designed with easy cleaning in mind. Materials such as soap, water, a rag, a Clorox wipe, or even a paper towel may be used to remove the paint from the device.

### *I. Main device structure*

*The acrylic top and sides allow for paint to be wiped off with materials such as a wet rag or a Clorox wipe. Additionally, the device may be placed in the sink and water may be run over the acrylic pieces with careful attention paid to not get the exposed wood wet. The sides where acrylic is connected to acrylic are mostly sealed to prevent water or paint from reaching the wood. If any wood parts were to get wet, it is recommended to wipe off the water using a paper towel or a rag and ensure the piece fully dries.*

## *II. Top sheet with dowel rods*

*Given that the top sheet and dowel rods are made from acrylic, water and any other cleaning material should not severely damage the integrity of this part. Similarly to how the main device may be cleaned, a rag, Clorox wipe, or any similar method may be used to remove the paint.*

## **MAINTENANCE**

### *Wood*

*As stated in the **CLEANING** section, careful attention must be paid to the wood on the device. It is not recommended that users allow the wood to be repeatedly exposed to water. This will cause warping, damage to the wood, and may cause mold to grow along with other structural issues. Thus, it is recommended that users wipe the water from the wood when contact is made.*