

## 20.0 miscellaneous

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### 20.1 version control

Version 1.0 - first version

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### 20.2 introduction

This document describes all miscellaneous issues in random order

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### 20.3 software used

This is not the entire list, items are added based on questions I get.

software	for what
<a href="http://www.tinkercad.com">www.tinkercad.com</a>	designing STL files
Ultimaker Cura 4.7	slicing STL files
Photoshop	designing graphics
Github	deploying software
iMovie	editing video's on site
<a href="https://freesound.org/people/ser_112280/sounds/178368/">https://freesound.org/people/ser_112280/sounds/178368/</a>	background sound used in video's

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### 20.4 Colours used in DMO

Blue: GN 006-01 Groningen (Histor PF Houtlak mat), waaier Gamma 2012

Gold : Vallejo 70996 Gold

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### 20.5 planets

Saturn and Jupiter are polystyrene spheres. Saturn has an MDF ring attached. Use wood glue to attached the ring otherwise the polystyrene will dissolve.

The smaller planets are wooden beads.

## 20.6 winch



The winch to hoist the DMO is pretty standard, but you do need to rewire it.  
Modifications I made were:

1. Extending the cable of the remote control as the winch is mounted somewhere on the ceiling and the remote control cable was therefore too short.
2. Inside the winch are two switches which are pressed in when the cable is fully wound up and one when the cable is at the end. This is done by the manufacturer in order to prevent the winch from damaging itself. Those two switches need to be outside the winch and pressed in at the lowest point of the DMO and the highest point of the DMO when using the lift.

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## 20.7 winding up electrical cord



The 12V power supply needs 220V AC. So the cable need to be at full length when the DMO is at its lowest position. When the DMO is lifted up over-length can be curled up and fall on the tracks of the DMO. In order to prevent this you need a winding up mechanism. I have used the same mechanism as are in vacuum cleaners. These parts are widely available on the internet.