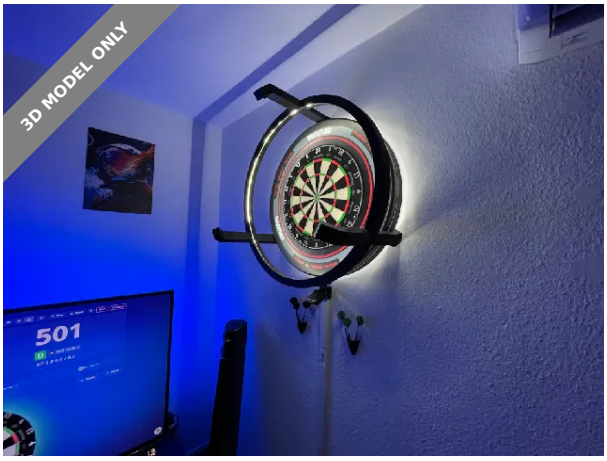

Autodarts Dart camera setup V2 / USER MANUAL / Darts (joint plug-in method)

Groni3D

VIEW IN BROWSER

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Summary

Website: www.groni3d.com / Questions? WhatsApp at +49 163 8036832 or private Message.

Hobby & Makers > Other Ideas

Tags: camera dart light holder cable led clip ring mount diy modular darts halterung joint accessory bracket electronics accessories management vision cablemanagement target surround scoring ringlight 3dprint mounting automated arrow dartboard setup gladiator winmau scheibe scorekeeper dartscheibe ov9732 autodarts steeldart scolia blade6 autodart

My Website

This is my custom-designed Dart camera setup with an integrated light ring. I printed the whole setup on a Bambu Lab A1. The problem with other setups is that I hit the camera on top when trying to throw a double 20.

User manual

You can find a user manual in form of a PDF in the files. It will explain every step you need to make.

Contact

If anything doesn't fit or you have a problem, feel free to write a comment, send me a private message, or contact me via **WhatsApp at +49 163 8036832** or **E-Mail at info@groni3d.com** :)

If you enjoy the setup I would kindly ask you to upload a picture of your setup with a small feedback and rate the setup.

In the middle, there is a small bridge with a height of 0.2mm. You can use it to center the setup and mark the drilling holes. If you don't need it anymore, you can just break it off. It is also very stable thanks to the bracing on the back. So if you bump into the cameras, nothing will happen.

If you want the same NUMBER RING as me check this out:

If you want only the LIGHT RING without the cameras check this out. Its the same as this one:

Requirement / Dimensions / Components

- Outer ring diameter: 745mm = 74,5cm
- Farthest point from the wall: 375mm = 37,5cm
- ca. 36h or 1d 12h print time (printed on Bambu Lab A1 and X2D)
- 1.370g filament
- Printer bed size: 256x256 (length, width) tallest object: 190mm
- Cylinder head screws:
  - 12x DIN ISO 4762 M2x8 or M2x10
  - 6x DIN ISO 4762 M4x18 or shorter
- 6x M4 Thread inserts (NOT REQUIRED -> Component is in a separate folder)
- LED Strip 6000K 3 meter width 8mm
- Ov9732 Camera **MIN. 2m !!!**
- Bubble level mini

Print settings

- Layer height: 0.2mm (or smaller if you want more detail)

- Support: Feet / Light feet / Case / Ring light left & right
- Support settings: Tree auto / Threshold angle 30° / ✔ "Remove small overhangs"
- Wall loops: min. 3
- Infill: 7% to 10% with Grid or Gyroid (depends what you like more)
- Seam position: back

Improvement from V1 to V2

Camera Position adjusted - LED strip position adjusted - Cable path adjusted - no ring joint visible from the front - length of the arms is shorter - tolerances adjusted

Model files

V2 Dovetail joint 0,04mm (recommended) 11 files

3x-feet.stl

3x-ring-light-right.stl

2x-ring-light-middle.stl

1x-ring-light-middle-led-stripe.stl

3x-ring-light-left.stl

1x-connector-middle.stl

3x-connector.stl

1x-connector-bottom.stl

3x-arm.stl

3x-case.stl

3x-cover.stl

Arm no Heat insert needed 1 file

3x-arm-no-heat-insert-needed.stl

Connector Middle SPLIT for Prusa MK3 - MK4 2 files

connector-middle-for-prusa-mk4-top.stl

connector-middle-for-prusa-mk4-bottom.stl

V2 Dovetail - 12mm LED (14mm channel) - MODIFIED PARTS ONLY

5 files

3x-feet-width-14mm.stl

1x-ring-light-middle-led-stripe-width-14mm.stl

2x-ring-light-middle-width-14mm.stl

3x-ring-light-right-width-14mm.stl

3x-ring-light-left-width-14mm.stl

V2 Dovetail joint 0,1mm

11 files

3x-feet.stl

3x-ring-light-right.stl

1x-ring-light-middle-led-stripe.stl

2x-ring-light-middle.stl

3x-ring-light-left.stl

1x-connector-middle.stl

3x-connector.stl

1x-connector-bottom.stl

3x-arm.stl

3x-case.stl

3x-cover.stl

V1 (OLD) Dovetail joint 0,04mm 14 files

3x-camera-cover.stl

1x-connection-left.stl

1x-ring-light-entrance.stl

1x-connection-ring.stl

1x-connection-top.stl

3x-ring-light-right.stl

1x-connection-bottom.stl

2x-ring-light-mid.stl

1x-connection-right.stl

3x-stand-top.stl

dart-setup-dovetail-joint-004mm.3mf

3x-ring-light-left.stl

3x-camera-case.stl

3x-stand-bottom.stl

V1 (OLD) Dovetail joint 0,1mm 14 files

1x-connection-bottom-01mm.stl

1x-connection-left-01mm.stl

3x-camera-case.stl

1x-connection-right-01mm.stl

3x-camera-cover.stl

2x-ring-light-mid-01mm.stl

3x-ring-light-left-01mm.stl

dart-setup-dovetail-joint-01mm.3mf

1x-connection-ring-01mm.stl

3x-ring-light-right-01mm.stl

1x-connection-top-01mm.stl

1x-ring-light-entrance-01mm.stl

3x-stand-bottom-01mm.stl

3x-stand-top-01mm.stl

Other files

v2-user-manual-dart-setup-aufbauanleitung-v2.pdf

v1-old-user-manual-dart-setup-aufbauanleitung.pdf

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