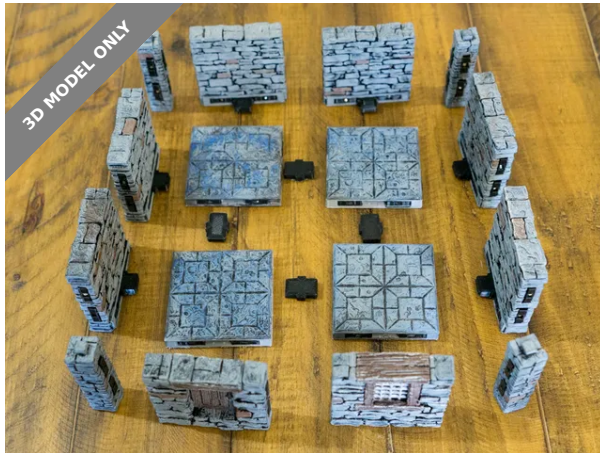




OpenLock Magnetic Connection System V3



Singularity Games

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Summary

This is a magnetic connection system for OpenLock terrain. It is glue free and polarity independent.

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Tags: [terrain](#) [clip](#) [gaming](#) [magnet](#) [magnetic](#) [connector](#)
[miniatures](#) [thingiverse](#) [openlock](#)

This is a magnetic connection system for OpenLock terrain. It is glue free, polarity independent and can make sturdy structures that are quick to put together and take apart.

You can learn more about OpenLock at: <https://www.printablescenery.com/>

Join me on patreon to get access to all of my designs (including the original fusion 360 files) and make design requests: <https://www.patreon.com/singularitygames>

The clips allow the magnet to freely rotate, which means that any magnetic clip can connect to any other since the magnets will move into the correct polarity. As they require no glue, the magnets can be easily reused for other projects. The clips are designed to be able to fit 3 side-by-side.

Version 3 of the clips are updated for easier printing and improved flexibility. They are designed and tested to be printed on an FDM printer using a 0.4mm nozzle and 0.2mm layer height. There is limited tolerance between the clips and the tiles, so make sure you cleanly remove the built in supports from the OpenLock tiles.

Upper left: Single Magnet Corner clip. Designed for 3x3mm barrel magnets or 3mm ball magnet. The clip is trimmed at a 45 degree angle to allow for four clips to fit into the L shaped column pieces by Printable Scenery.

Upper Middle: Dual Ball Magnet Clip. Designed for two 3mm ball magnets. This clip offers the greatest connection strength. These clips are best used exclusively with other dual magnet clips as they don't align well with the single-magnet clips.

Upper Right: Dual Ball Magnet Corner Clip. Designed for two 3mm ball magnets. The clip is trimmed at a 45 degree angle to allow for four clips to fit into the L shaped column pieces by Printable Scenery.

Middle Left: Wall Support Clip. Designed to fit into the middle hole on the wall tiles. These clips support the connection between the wall and floor tiles.

Middle Middle: Standard flexible clip. By request: the flexible design of the magnetic clip applied to a standard clip. Like the other clips these are designed to fit 3 clips side-by-side.

Middle Right: Floor Support Piece. A piece that slots between floor tiles for added rigidity if required.

Bottom Left: Open-side Magnetic Clip. Designed for 3x3mm barrel magnets or 3mm ball magnet. The opening on the side allows the magnets to poke out slightly and touch the other magnet increasing the connection strength.

Bottom Middle: Single Ball Magnet Clip. Designed for a single 3mm ball magnet.

Bottom Right: Closed-side Magnetic Clip. Designed for 3x3mm barrel magnets or 3mm ball magnet. The closed-side is easier to print and can be painted to help it blend in with the tile, however the connection strength is weaker.

Credits:

OpenLock is an incredible system by Printable Scenery: <https://www.printablescenery.com/>

I got the idea for the flexible clip from eleotlecram: <https://www.thingiverse.com/thing:3367267>

Original ball magnet clip from Pepsicat585: <https://www.thingiverse.com/thing:3248643>

Clip with magnet contact from MarcCCTx: <https://www.thingiverse.com/thing:3809057>

Dual Ball magnet idea from dmDerZorn: <https://www.thingiverse.com/thing:4441185>

Update 3/5/2025: By request, added two magnetic clips for tiles scaled 125%. Let me know if you encounter issues with these clips.

Update 2/13/2021: V3: Added dual Ball Magnet Clips.

Update 3/28/2020: V3: Major design revision for improved printing and flexibility. Added corner clips and standard flexible clip.

Update 8/16/2019: V2: I added alternate clip types for increased strength and for ball magnets.

Update 8/8/2019: V2: I added the wall clip and double connector to help make large structures more solid.

Update 7/10/2019: V2: I updated the file slightly to to make the center circle just a bit bigger to help ensure the magnet can spin freely.

Print Settings

Rafts:

No

Supports:

No

Resolution:

0.2 mm

Notes:

Print it flat on the bed. Tested using a 0.4mm nozzle and 0.2mm layer height. Printed with a brim. If the nozzle diameter is set to something larger than 0.4mm it will not print correctly.

Category: Games

Model files



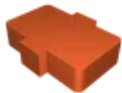
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openlock_dual_hollow_clip_v3.stl



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openlock_dual_ball_magnet_clip_v3-scaled-for-125-ti... .stl

[Find source .stl files on Thingiverse.com](#)

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