



# TTVR Modular Virtual Reality Headset



TickTock

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## Summary

This is my third generation virtual reality headset. The primary feature introduced this time is a detachable cradle...

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This is my third generation virtual reality headset. The primary feature introduced this time is a detachable cradle for the phone. This allows you to quickly remove the phone to switch apps, answer a call, etc. Additionally, it makes it very easy to add support for other phones. Currently I have cradles for a Samsung Note4 with and without an Otter Box enclosure. Others will follow. If you are impatient, I uploaded the cradle base with all the features required to connect to the goggles so other makers can easily build their own cradles for any device they choose.

## Instructions

I will improve the instructions and add additional lens and phone options along and along. To build, you need to print the following at 0.2mm layer height:

- 1) TTVR - this is the main headset. No supports or brim required (included in the model).
- 2) TTVRCradle - either Note4Bare(Note4, no case) or Note4OB (Note4 with an Otterbox enclosure).
- 3) LensmmX2 - you will need a pair of lens holders to fit the lenses chosen. No supports or brim required.
- 4) clips - a complete set of clips required for hands-free operation. No supports or brim required.

Additionally, you will need:

- 1) a pair of convex lenses with 38-48mm diameter and 45-56mm focal length. If you need room for glasses, then stay on the low end (45-50 mm) of focal length. <http://www.surplushed.com> has a great selection at amazing prices (typically \$4.50/ea). I am currently using 45.1mm diameter double convex (DCX) lenses with 55.8mm focal length and these seem about perfect for me (no glasses).
- 2) 1.5" elastic
- 3) 3/4" weather stripping
- 4) Two 1/2" X 1/8" button magnets

The TTVRCradleBaseNoPrint.stl is just the hardware required to connect to the headset for anyone who wishes to make a cradle for another device. You just need to add a pocket of the correct size.

Category: Mobile Phone

## Model files

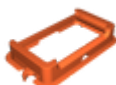
**lens48p4mmx2.stl**



**ttvr.stl**



**ttvrcradlenote4bare2.stl**





**lens45mmx2.stl**



**ttvrcradlebasenoprint.stl**



**clips.stl**



**ttvrcradlenote4ob.stl**



**lens38mmx2.stl**

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

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