

First of all, you will need to hire a full-time system administrator.

He is obliged:

- know how to build a peer-to-peer LAN, configure it;
- know the structure of the computer and perform maintenance of computers running Windows 10;
- make setup, carry out regular maintenance, troubleshooting, repairing, replacement of components;
- monitoring the health of the system and all equipment.

The equipment

For each player

1. Personal Computer (PC):

- The motherboard must have 8pin power connector,
- Processor (CPU) — Intel Core i7 4790 or higher,
- Video card (GPU) — GeForce GTX 1070 6 Gb and higher, with HDMI slot,
- RAM 8 Gb and more,
- Power supply — 800W or higher,
- There should be 2 USB 2.0 ports and 3 USB 3.0 ports (not 1.0) apart from ports for mouse and keyboard,
- Solid state drive SSD 128 GB minimum.

2. Uninterruptible Power Supply (UPS) — Ippon Back Office 600 or similar.

3. Headphones with a microphone — Razer Pro Neon or similar.

4. Operating system — Windows 10 Pro x64.

5. VR headset for each player — **Oculus Rift CV1** or **HTC Vive**.

6. Hands' Motion Detector — Leap Motion.

7. Ethernet cord.

8. USB extension cord.

9. Internet Connection for driver and system updates. Comfortable speed of the Internet for this purpose about 50 Mbit / s.

Alternatively, you can use the Oculus Ready PC solutions, such as:

- [Alienware Aurora](#)
- [Alienware Area-51](#) (HTC Vive Optimized)
- [Lenovo Ideacentre Y700](#)
- [Falkon Tiki](#)

Note that in some configurations of these models the power supply should be changed to PSU with a capacity of 800 watts, and a hard drive (HDD) to a solid-state drive (SSD), or just add it to the configuration from the start if possible.

For the operator

1. Network Switch. At least an 8 port Gigabit switch is necessary.

2. A basic laptop or a PC with Intel Core i5 CPU or higher, Intel HD 5000 GPU or higher, 4 Gb of RAM or more.

3. Operating system — Windows 10 Pro x64.

4. Mouse.
5. Headphones with a microphone.
6. Ethernet cord.
7. Constant Internet connection. For the game needs about 3 Mbit / s.

The operator's PC also needs in regular updates. Comfortable speed of the Internet for this purpose about 50 Mbit / s.

Space and arrangement

1. **Area:** 15-20 m² (160-215 ft²)

2. **Walls and Surfaces:**

1. Your room should not have any reflective surfaces in it such as: a mirror, a monitor (apart from the operator's monitor), reflective plastics and so on.
2. It's critical that your walls be black or a very dark colour so they can 'swallow' up any light in the room

3. **Lighting.** You should make sure to completely cover any sources of sunlight or electrical lighting:

1. All doors in the room should be closed,
2. if there is electrical lighting, it needs to be able to be turned off during a game session,
3. if there are any windows they should be outfitted with thick blinds so as to not let in direct sunlight or occasional sunrays.

4. **Temperature.** The room should be cooled (either by an air conditioner or by a fan) with the optimal temperature being 18-20°? (64.4 to 68°F).

5. **Seating.** The room should have in it an appropriate number of seats for the corresponding number of players.

! The requirements listed below are essential for the VR sensors to detect hand and head movements. Should these requirements not be followed — the sensors may not work well and or correctly.

- Seating must not move easily back and forth or allow a player to slouch. It should be a straight-backed chair.
- Seating must not rotate.
- Seating must be without arm-rests.
- Seating must have a back support. Ideally, it should hold the player in a sitting position so that he/she will look forward and not at an angle.
- Players should not sit face to face.
- Each player should have roughly 1.5 meters of free space around them so they can move their hands freely.
- Players should not sit closer than 1 m away from each other.



Cameras. Your Oculus CV1 (Rift DK2) cameras should be placed within the 1—1.8 meters away from a player's head and higher than 1.7 meters from the floor. If the dimensions of your workspace allow for it, cameras should be attached to walls (using the attachment materials included in the kit as well as mounting tape); if not, it's better to use a base, stand, or other means to mount the equipment.

Mount the HTC base stations according to the HTC instructions.