



## PRIME II Haptic Edition

**To make use of the Manus Prime II Haptic gloves a valid license of Manus Core is required**

### Cutting-edge haptic feedback technologies

The Manus Prime II Haptic gloves are next-gen in cutting-edge haptic feedback technology. The sense of physical touch is not easily replicated, with the Prime II Haptic, precision is paramount to deliver intuitive and natural interactions with low latency between user and virtual hands. Whether holding digital objects, feeling textures, pushing buttons or pulling handles inside virtual experiences, the gloves provide a snug and comfortable fit to ensure delicate vibrations are felt across hands and fingers, with the hyper-fine feedback loop from motor control to haptics providing a powerful presence in VR. This is achieved by assigning a programmable LRA haptic module (linear resonant actuator) to each individual finger looping back unique signals depending on the interactions with virtual objects and materials along

with feedback applied inside the virtual experience. Access the user friendly dashboard and driver to calibrate and control the agnostics of your gloves where haptic feedback is fully customizable, and is equipped with an integrated material editor, and signal strength, frequency and resonance adjuster.

Prime II Haptic significantly reduces cost and time for teams collaborating on VR projects in motion capture, robotics, prototyping, educational VR, virtual training and more—or take gaming experiences to a whole new level of play for VR Arcade games.

## PRIME II Haptic Edition

### Features

01

#### Precise Finger tracking

Merging robustness with precision, all Prime II series gloves incorporate industrial grade flex sensors fused with high performance inertial measurement units, raising the bar in high fidelity finger tracking. The flex sensors measure 2 joints per finger, enhanced with 11DOF tracking of individual fingers by the IMU's to ensure fine finger movements. IMU drift is prevented with newly implemented automatic filters, enhanced with reference points of the robust flex sensors. This enables detailed finger spreading measurement without losing continuous quality during a live performance capture.

02

#### Interchangeable Battery

All next generation Manus Gloves come equipped with interchangeable batteries, with massive upgraded battery life powering 5 hours of continuous uninterrupted motion capture time. Choose to charge the battery during use, or charge individually. Gloves instantly reconnect after swapping the battery, eliminating recalibration down time.

03

#### Universal Mounting System

One of the key features of the Prime II series is the easy implementation of third party hardware. For that reason the Prime II gloves come with a universal mounting system as standard, allowing the mounting of any type of tracker with dedicated adapters. These adapters slot in with ease on top of the Prime II series gloves.

04

#### Calibrate in 45 seconds

A 45 second turnaround is all it takes to get moving. With three simple gestures the Manus Prime II gloves take a quick and accurate calibration tailored to the users hands. Capturing larger groups is equally streamlined, Prime II supports simultaneous multi-user calibration resulting in smoother team sessions and maximized time, making the Prime II gloves an easy, time efficient choice.


05

#### Washable gloves

With many hours of use, it's essential to keep gloves in top shape and ready to go for your next session. We've made Prime II gloves washable by easy removal of sensors from the glove textile. Additional glove textiles can be acquired separately so all team members have their own personal set, simply swap the sensors from one textile to another to use the same hardware ensuring responsible hygienic use.

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## Plugins

	 unity	 UNREAL ENGINE
Finger Tracking	✓	✓
Hand Motion & Orientation	✓	✓
Interaction framework	✓	✓
Haptic feedback	✓	✓
Multiplayer support	✓	✓
Device diagnostics	✓	✓
Connected devices	✓	✓

## Compatibility



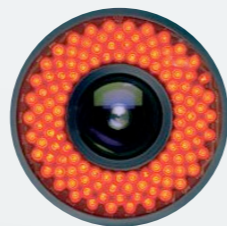
✓ ^ Γ J □



 STEAM™ VR



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VICON



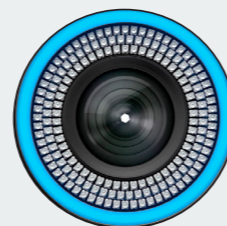
VIVE



VALVE INDEX



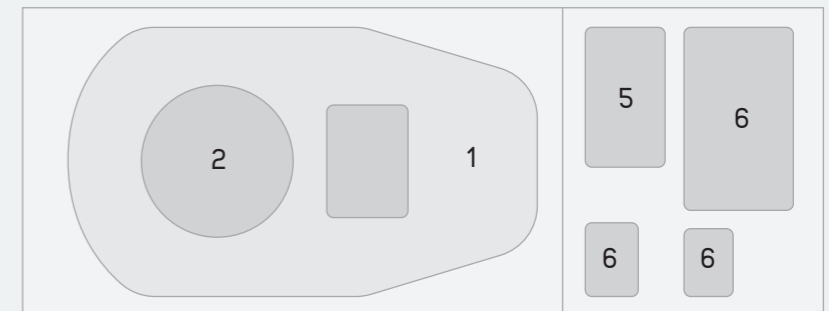
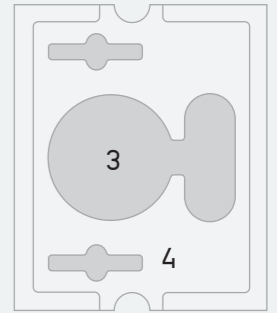
ART ▶



 OptiTrack

## What's in the box?

1. One pair of Manus Prime II Haptic Gloves
2. USB-C Cable x2
3. Dongle
4. Batteries x2
5. Charger
6. Mounting adapters



## Hardware specs.

Signal latency	<5ms
Sensor sample rate	90Hz
Battery duration	5 hours (swappable)
Charging	USB-C (5V)
Weight	60 grams
Wired Communication	USB-C
Wireless Communication	Proprietary high performance 2.4 GHz protocol (certified)
Finger sensor type	10x 2DoF Flexible sensors and 6x 9DoF IMU's
Finger flexible sensor repeatability	>1.000.000 cycles
Orientation sensor accuracy	+/- 2.5 degrees
Textile information	High gauge, antibacterial, sports polyester