



**Putting hands  
at the center of  
motion capture.**



**Create nuanced, lifelike  
hand content at speed.**

2

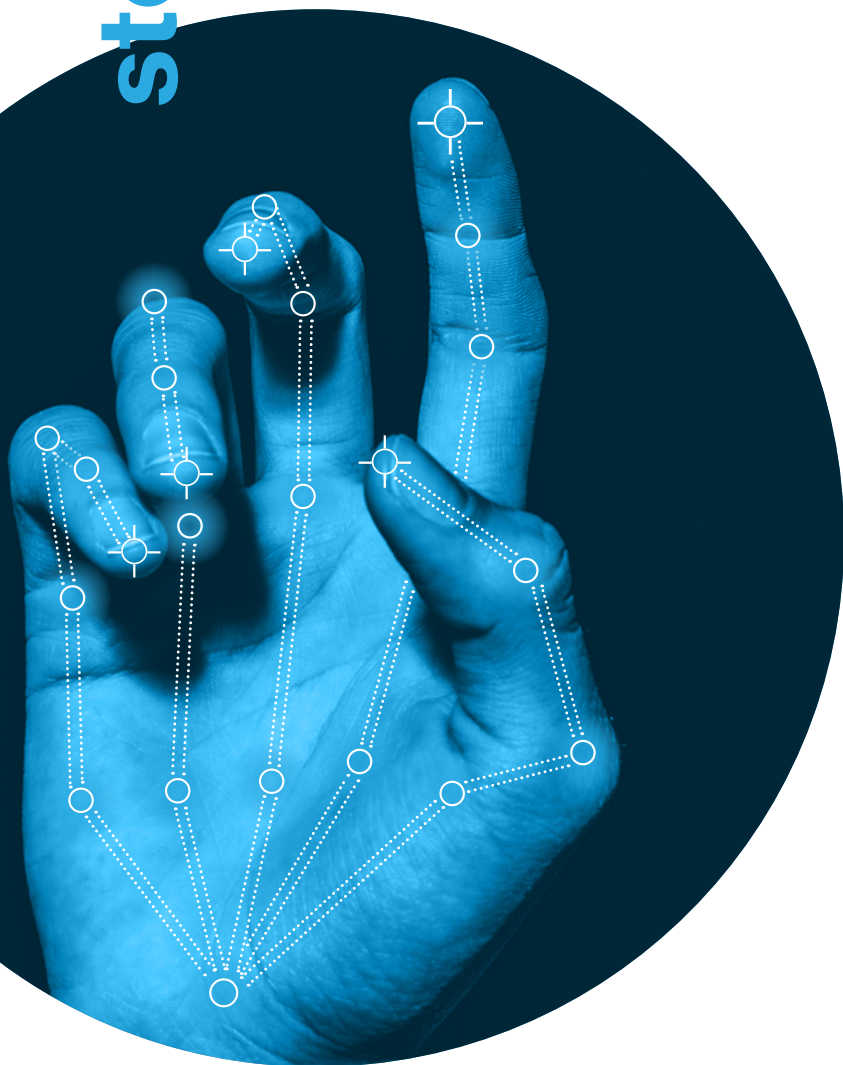
# storytelling

## **Get creative with premium hand motion capture from StretchSense**

As an engagement tool, hands have been relegated to an unfortunate supporting act in character animation because creating great hands has been unfeasibly slow and expensive.

## **A new era in content engagement – storytelling with hands**

The StretchSense hand motion capture solution offers VFX teams the chance to bring hands back to their rightful place: the forefront of intense, emotional storytelling.



# The stretch sensor difference.

## Superior stretch sensor technology that produces animator-ready data

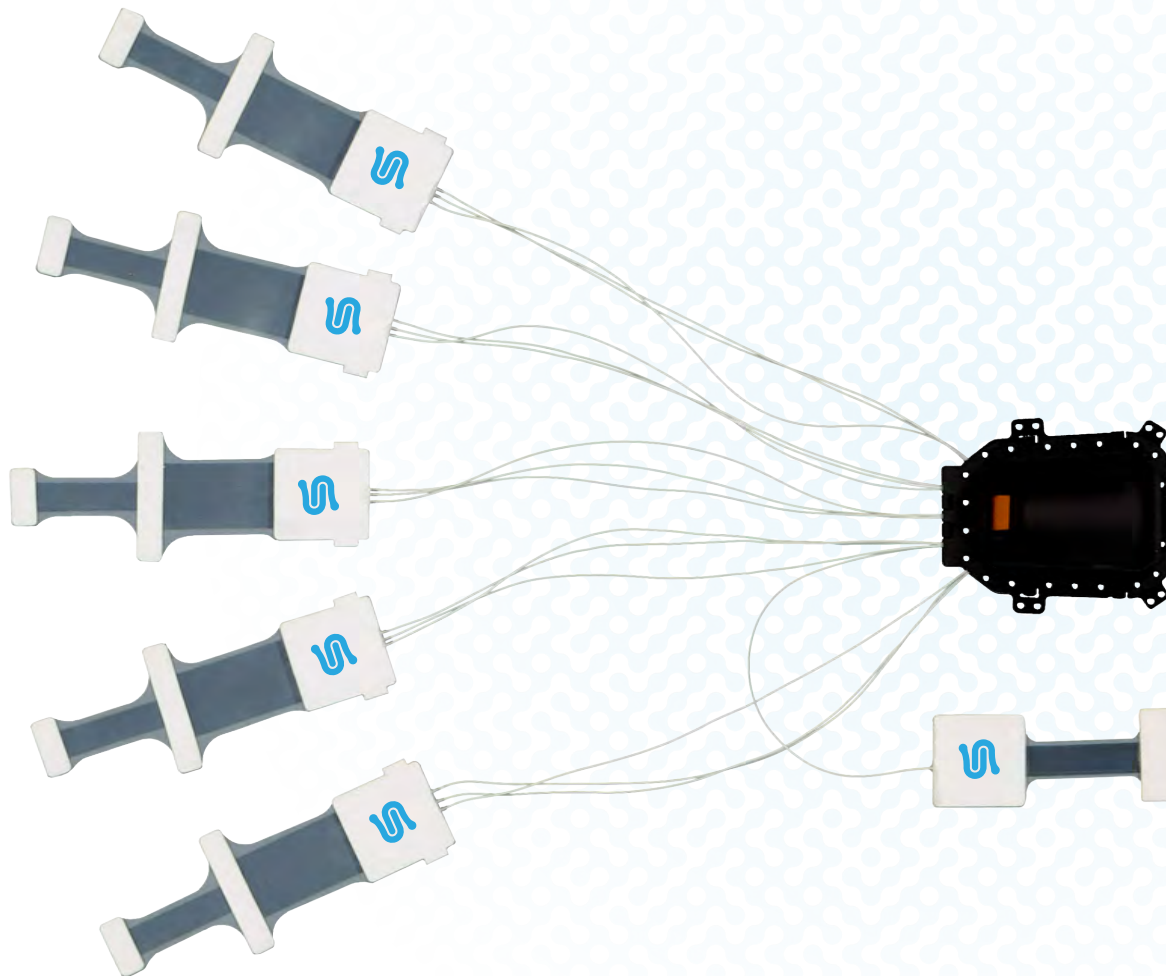
Using a fundamentally different sensor technology to other hand motion capture solutions, our gloves deliver highly repeatable, accurate measurements of hand and finger movement. The result is motion data with smooth FCurves and no bluffs, spikes or loss of keyframes, making it easy for animators to work with.

- ✦ Highly accurate, repeatable measurements
- ✦ No occlusion or drift
- ✦ Animator-ready data

“We have doubled the speed of our post-production through the use of the StretchSense gloves.”

ADRIAN PERDJON -  
CEO, BONES STUDIO

3



## A new paradigm in hand motion capture.

4

### StretchSense MoCap Pro gloves

Designed for action in big stage productions, or capture at your desk, with high fidelity data that requires minimal clean up.

### The new Mocap Pro Fidelity

Our new model glove takes mocap to another level, with a step-change in performance and data quality, combined with a feature set that ensures that both production day and post-production go smoothly.

fidelity



“This utterly transforms the business model of game and VFX studios allowing them to creatively align, take on more work, and produce more and better content.”

BEN O'BRIEN – CEO, STRETCHSENSE

# A sensor for every degree of freedom in the hand.

## New levels of accuracy

Unmeasured joints mean guesswork in your captured data. The MoCap Pro Fidelity is the only glove available that has sensors that measure all 26 degrees of freedom in the hand.

New sensors over the distal knuckles and around the wrist provide highly accurate multi-knuckle bend measurement.

## Fluid, life-like motion

By measuring the whole hand, and because our sensor technology delivers a smooth curve straight from glove, minimal clean-up is necessary, realism is preserved, and hand movement looks natural.

## Extensive Bluetooth range paired with features designed for demanding mocap environments

In addition to capturing higher fidelity prop interaction data, resulting in more lifelike movement, the Fidelity has less fabric and more grip pads at the fingertips for better prop control.

With its **20m Bluetooth range**, mocap teams can be confident of connectivity on even the largest stage.

Each Mocap Pro Fidelity glove comes with 26 sensors that allows a powerful array of fluid motion capture movement.

5



accuracy

The Mocap Pro Fidelity glove goes one step further in versatility with a 20m Bluetooth range.

20m



## MoCap Pro models compared

6

supersplay



### MoCap Pro SuperSplay

#### Sensors

Total number of sensors	16
Sensor for every degree of freedom in the hand	–
Superior prop interaction data	–

#### Prop-use features

Wrist compensation sensors	1
Superior fingertip design for prop handling	–

#### Connectivity

Bluetooth Range	10m
MicroSD reader on glove	Supported

#### Battery

Battery life	8 hrs
Charge time	2.5 hrs
On-glove battery status and charge light	–
Charge glove while recording	–

#### Glove & software

Easy on and off	–
All-day comfort	Yes
Machine washable	Yes
Works with all versions of Hand Engine	Yes
Velcro over-glove for optical markers	Optional extra

## MoCap Pro Fidelity

### Sensors

26	Total number of sensors
Yes	Sensor for every degree of freedom in the hand
Yes	Superior prop interaction data

### Prop-use features

5	Wrist compensation sensors
Yes	Superior fingertip design for prop handling

### Connectivity

20m	Bluetooth Range
64GB microSD card included	MicroSD reader on glove

### Battery

8 hrs	Battery life
2.5 hrs	Charge time
Yes	On-glove battery status and charge light
Yes	Charge glove while recording

### Glove & software

Yes	Easy on and off
Yes	All-day comfort
Yes	Machine washable
Yes	Works with Hand Engine 2.0 and above
Optional extra	Velcro over-glove for optical markers



# If MoCap Pro gloves are your rocket, Hand Engine is your mission control.

8

## Hand Engine

Designed for a busy mocap stage, you can connect, configure and calibrate your gloves at speed and all from one place. The interface between StretchSense gloves and the animation software of your choice, you choose how you record data and how you retarget. With Hand Engine, you're in control.



“Everything with the gloves is working perfectly!  
Calibration has been a breeze and all our tests so far have been very successful. It really adds a new level of depth to our body capture.”

DREW SUMNER – VISUAL SOLUTIONS ENGINEER,  
ENVISION CENTER, PURDUE UNIVERSITY

## Tailor our solution to your unique requirements with pose detection and machine learning.

9

### Optimize for your use-case

Whether you need to capture the fluid movement of your performer, or to hit exact poses for scenes using props, Hand Engine can adapt to your requirements.

#### ✧ Multi-performer scenes

Calibrate the gloves in only 30 seconds to get going fast in multi-performer scenes with the ability to manage up to six performers at once.

#### ✧ Handling complex props

Our unique Pose Detection technology allows you to capture smooth continuous hand motion and hit reliable, stable prop poses in sync with your performer.

#### ✧ Set keyframes in Maya or MotionBuilder

Faster and more flexible than a pose library, animators can set keyframes on a character's hand without having to adjust every bone. Sometimes referred to as Deskcap, capture keyframes while working from home.

#### ✧ Pose library population

Create your pose library in Hand Engine and use Pose Detection technology to output those poses in sync with the performer's body motion, drastically reducing post-production time.

#### ✧ Backup to on-glove microSD

With a microSD card slot included with the glove, your raw data is always backed up so you always have a plan B.



**REALTIME  
PRODUCTION  
OR PREVIS**



**BIG STAGE  
CAPTURE**



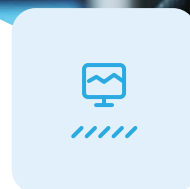
**REMOTE  
CAPTURE**



**VIRTUAL  
PRODUCTION**



**VR/AR**



**DESKCAP**

**Real-time data  
feeds creativity.**

10

smoother



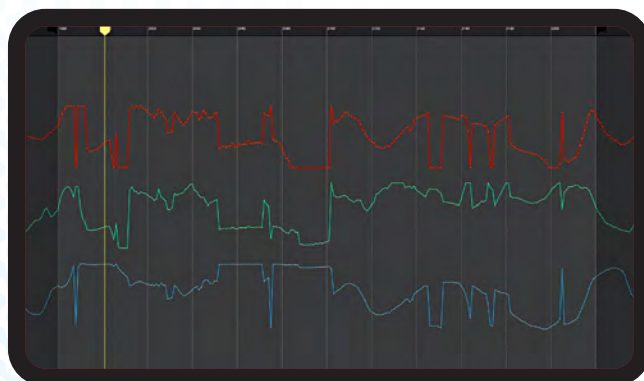
### **Animator-ready data straight off the glove**

Our sensor technology streams high fidelity hand motion data in smooth FCurves straight out of the glove with no dropped keyframes.

### **Cut your post-production time in half**

Because stretch sensors are highly accurate and don't suffer from occlusion or drift, substantially less clean-up is required compared with other solutions. Mocap teams can be confident of producing highly usable hand data to pass to animation.

### **FCurves tell the story best**



OPTICAL HAND DATA



THE SAME DATA CAPTURED SIMULTANEOUSLY WITH  
STRETCHSENSE GLOVES

**Built to fit your  
pipeline perfectly.**

11

## Integrations

Every pipeline is different, so we let you do things your way. Choose from a range of integration options:

### Stream



### Synchronize



### Robust workflows

FULL BODY FBX

REMOTE TRIGGERING

TIMECODE SYNC



flexible

“Having quick usable hand data allows us to generate more creative ideas.”

LYLE COOLEY, MEDIA MOTION CAPTURE  
SUPERVISOR, VERSATILE

### **Training & support**

We want you to get the same mocap results we do, so we provide dedicated support account managers whose sole focus is on helping you be successful with our solution.

Our Knowledge Base is full of easy to understand documentation on best practice workflows, as well as helpful videos and how-to guides.

### **Start producing high quality hand content at speed**

Find out more or arrange a demo:

[sales@stretchsense.com](mailto:sales@stretchsense.com)

+1 415 800 1003

[www.stretchsense.com](http://www.stretchsense.com)



[www.stretchsense.com](http://www.stretchsense.com)

