



**MOCAPSUIT**

August 2017





## NEW OPTO-INERTIAL HYBRID

Easy like a gyro suit, accurate like an optical suit

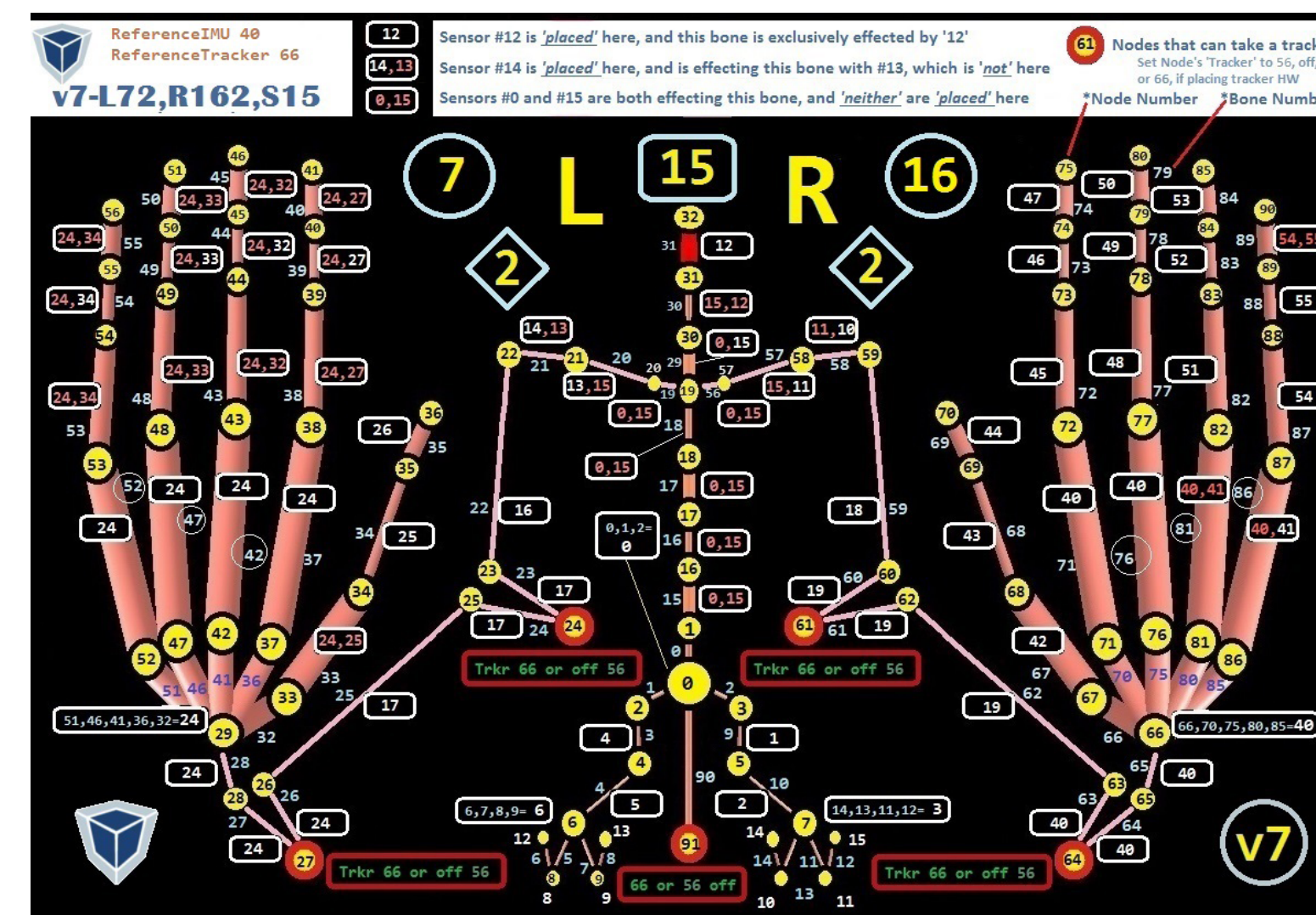
- First ever wearable sensor suit with no root drift
- Optical trackers on pelvis, gyros everywhere else
- Best in Class Cobra Gloves for fingers (7, 13, 16)
- One keystroke to calibrate Vive & suit together
- Use additional 'Trackers' for robust sitting/reclining
- Use trackers to refine subject's base skeleton
- Walk out of the optical space without disruption
- Restart HW mid performance in 3 seconds
- Sockets and sensors included for props
- Up to 55 IMUs @ 240fps, 10 trackers, & Sync HW
- Mobu Unity Unreal PSH/Jack SDK SynSync VRPN



“Most accurate finger capture on earth”

# OPEN KINEMATICS

- Modify skeletons or create unique ones
- Change calibration poses
- Create local coordinate system for any joint
- Axis-separated inter(extra)polation for any bone
- Create a tracker node anywhere on the skeleton
- Edit skeleton parameters in post
- SynDash kinematics & capture management SW

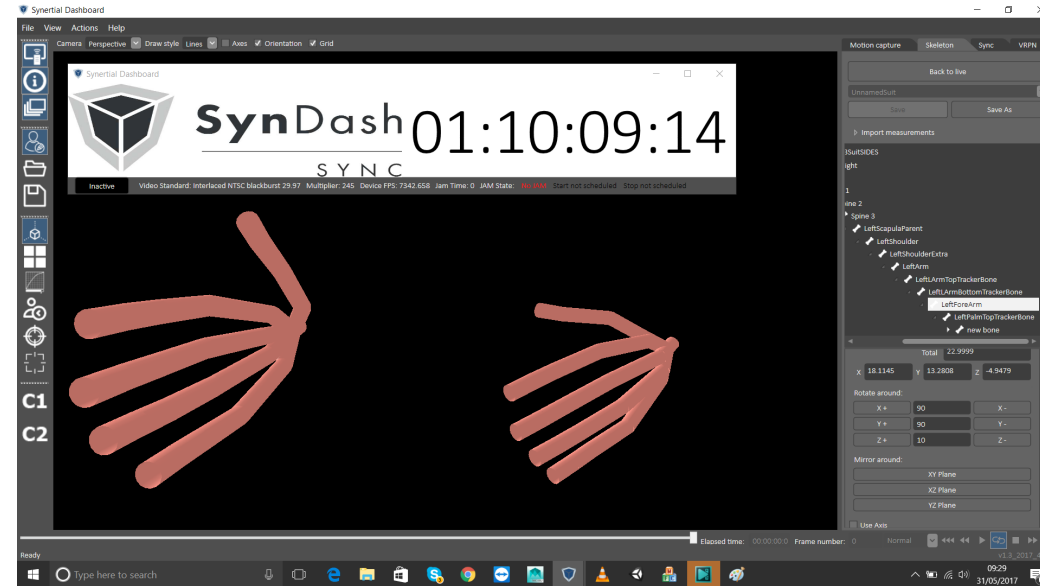


# PRACTICALLY

- Revolutionary 'Chaps' pants: easy ingress/egress, no stretch-artefacts, comfortable to leave on
- Thin soft top, adjustable sensor pads, comfortable to leave on, easy sensor access & replacement
- Solo operation, quick Vive & suit setup, ready to go when SteamVR is running,



# SYNC HW/SW TO VICON/OPTITRACK



- Sync Synertial sensors and Vive trackers thru HW to Blade or Motive
- Jammed timestamps on every frame
- Frame rates of up to 1000 FPS (29.97 standard)
- Jam-Sync once or twice per session
- Start and stop triggers from inside Blade or Motive
- Use optical generated bvh to create perfect Mocapsuit skeleton
- Synertial sensors synced, with or without Vive trackers



## PROCESSING HUB

Up to 240 HW fps; 120 standard

AA Batteries, 5vDC wall adapter or power bank

Separate sync HW up to 1000 FPS (Standard 29.97 FPS), drawing power from main hub

Access-point agnostic WIFI

Multiple PCs can run the same HW

12.8cm x 7.8cm x 2cm with locking connectors

## SENSORS

Up to 55 IMUs: 9-axes, gyroscopes, accelerometers and magnetometers

At least 1 Vive Puck and 2 Base Units

On-board processing on each sensor; -Smallest sensors in the market

Internal update rate: 500Hz

Gyro range: 2000 degrees/sec

Accelerometer range: 16Gs

## NEW HYBRID SKIN SUIT

Lycra & strap combination

New easy 'Chaps' style lower body

Thin top w/ Velcro sensor pads to

Color coded Chaps

## IN THE CASE

Suit & Glove electronics

Wireless processing hub

Spare sensors

Suit & Glove cloth (2 sizes)

WiFi Access Point

Basic capture SW and Diagnostic & setup SW

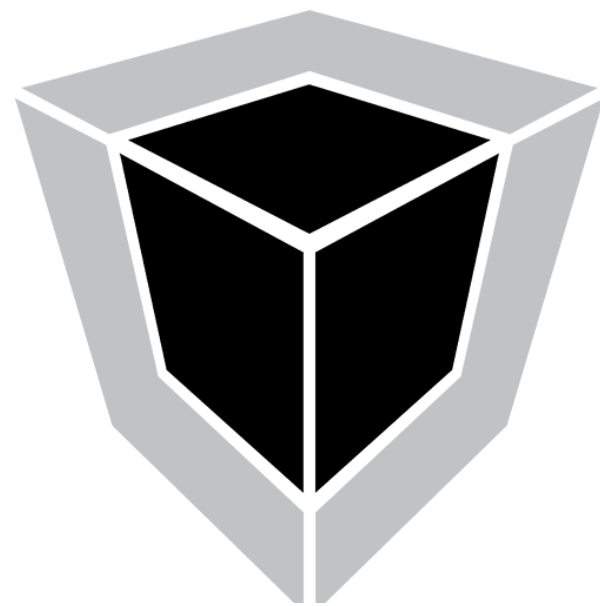
Batteries & charger

Carrying case 40x 60 x 20



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