



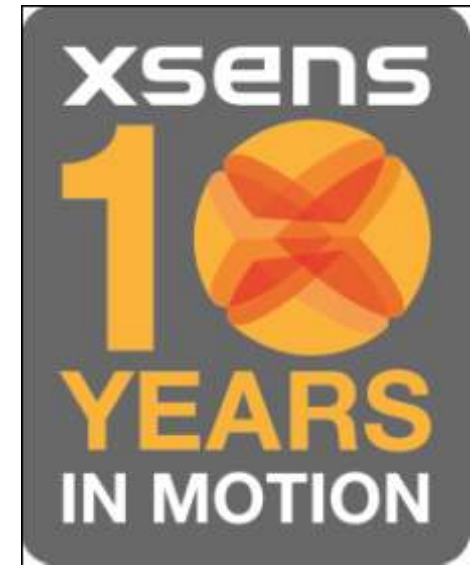
xsens

Per Slycke
CTO & Founder

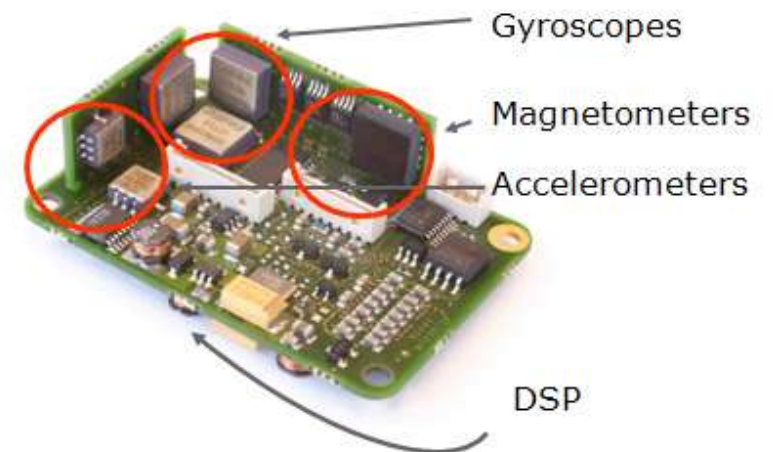
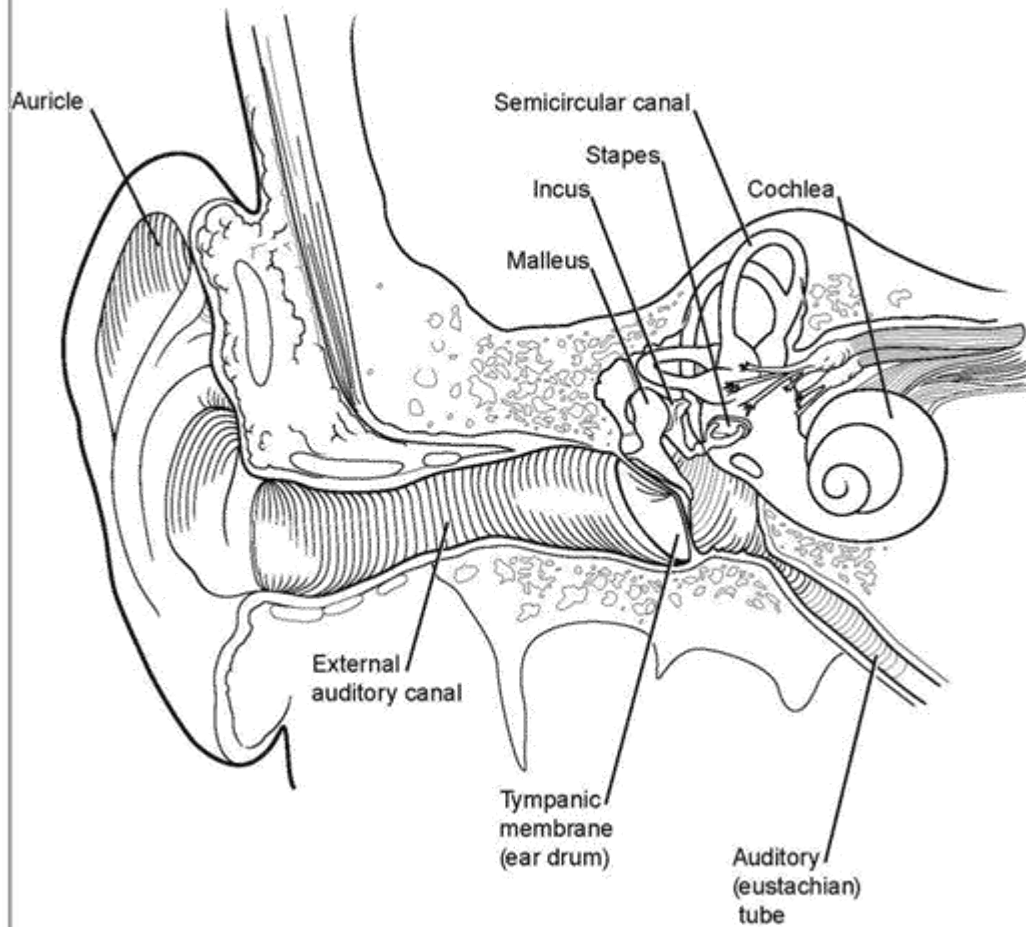
Xsens at a glance



- 3D tracking and MEMS inertial sensing technology experts
- Privately held
- HQ in The Netherlands
- Sales Office Los Angeles, USA
- 65 employees (50% R&D)
- Serving clients in more than 60 countries
- High growth rate
- Extensive specialized sales/support staff



Inertial sensors ~ vestibular



Xsens industries



Industrial applications

- Marine instruments
- (Under) water, ground & aerial vehicles
- Antenna & camera stabilization



Entertainment/Training & Simulation

- Full body motion capture
- Film, game development, TV



Movement science

- Analysis of human motion
- Rehabilitation, sports science, biomechanics research, ergonomics



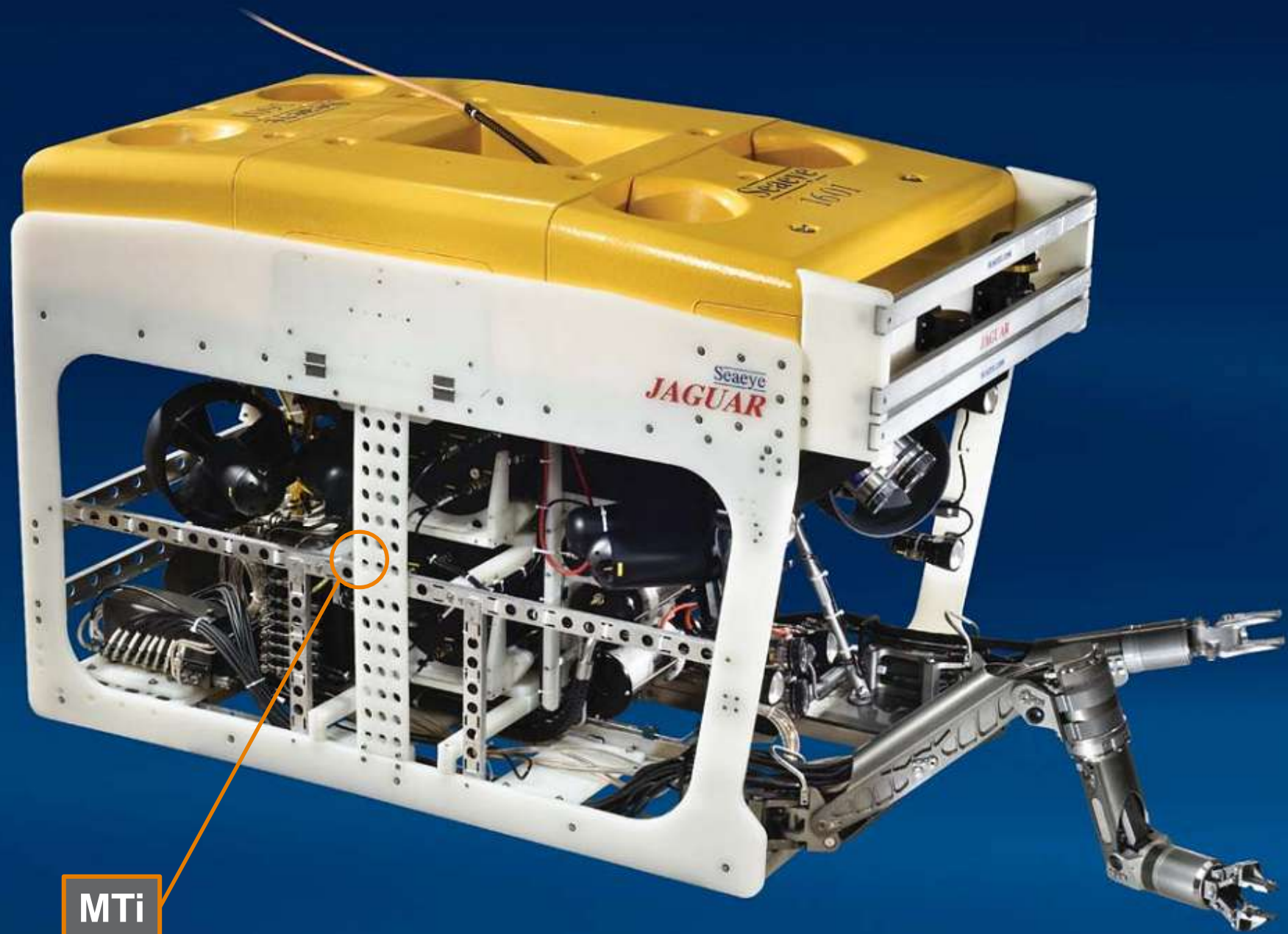
MTi-G inertial/GPS





MTi-G





MTi

MTi-G





MTi

MVN Product Overview



MVN Suit



MVN Case



MVN Studio

series production since 2006

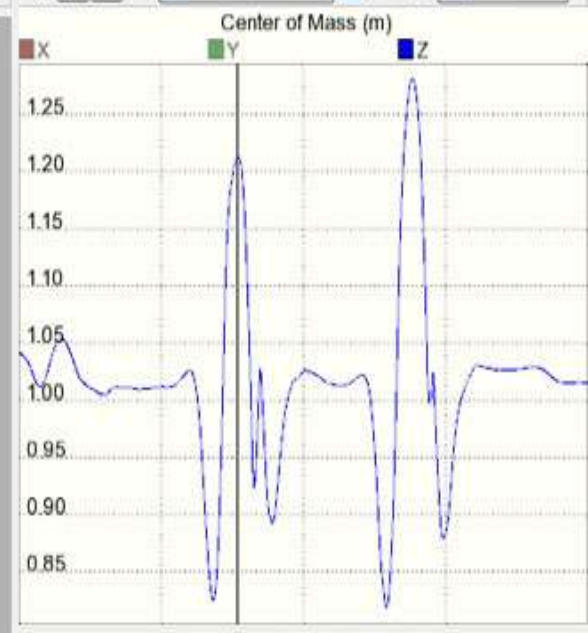
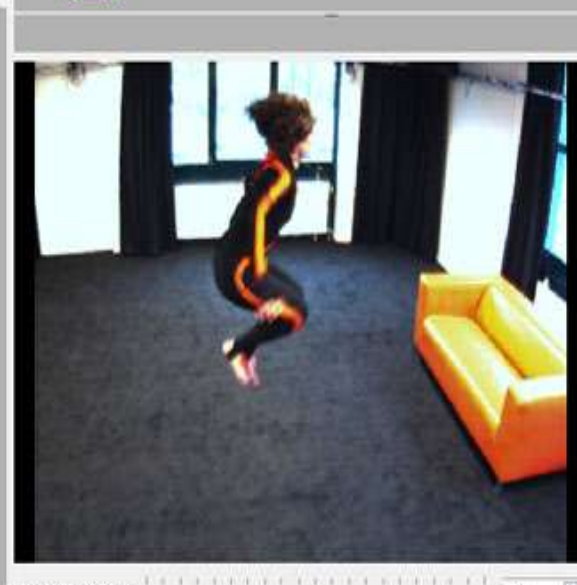
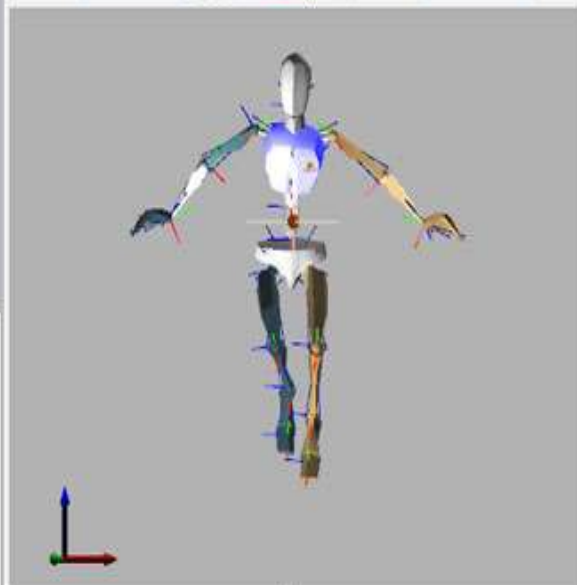
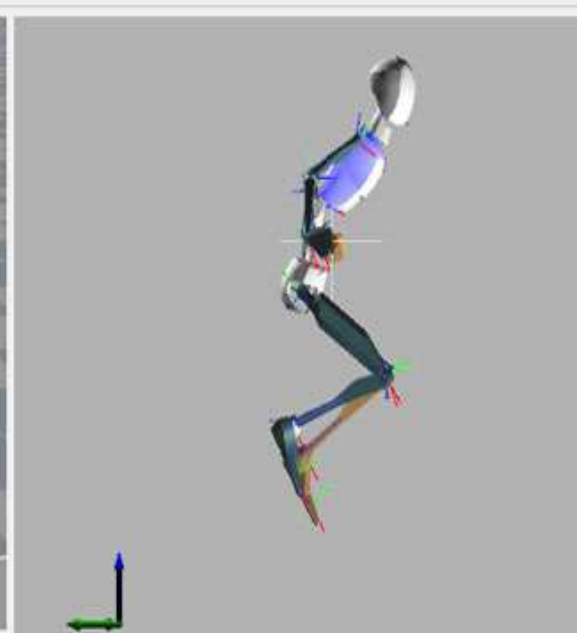
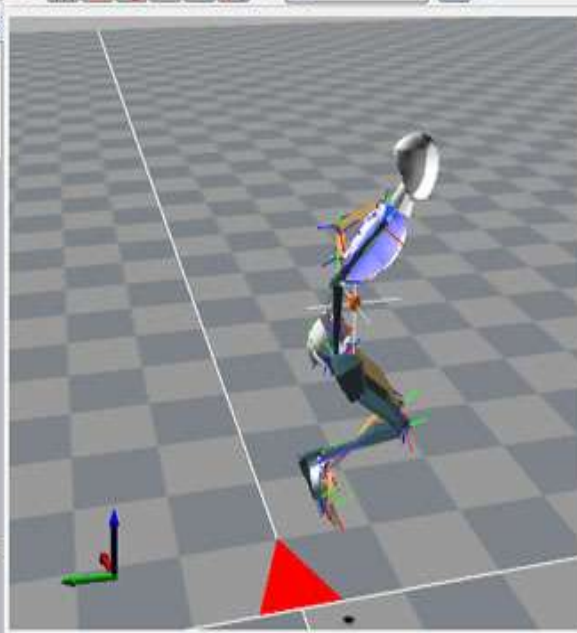


MVN Product Overview



Calibration Tree view 4 windows

- Tree view
 - L3
 - T12
 - T8
 - Neck
 - Head
 - RightShoulder
 - Acceleration
 - Orientation
 - Position
 - Angular Acceleration
 - Velocity
 - Angular Velocity
 - Points
 - Sensor data
 - Acceleration
 - Orientation
 - Angular Velocity
 - Magnetic Field
 - RightUpperArm
 - RightForeArm
 - RightHand
 - LeftShoulder
 - LeftUpperArm
 - LeftForeArm
 - LeftHand
 - RightUpperLeg
 - RightLowerLeg
 - RightFoot
 - RightToe
 - LeftUpperLeg
 - LeftLowerLeg
 - LeftFoot
 - LeftToe
 - Joints
 - jL5S1
 - jL4L3
 - jL1T12
 - JT9T8
 - JT1C7



Time offset (ms) 35

MVN MotionGrid®



- Indoor “GPS system” based on UWB RF
- Position reference frame to prevent position drift
- RF based (UWB):
 - No occlusion issues
 - Wide area
 - Scalable
 - Nomadic

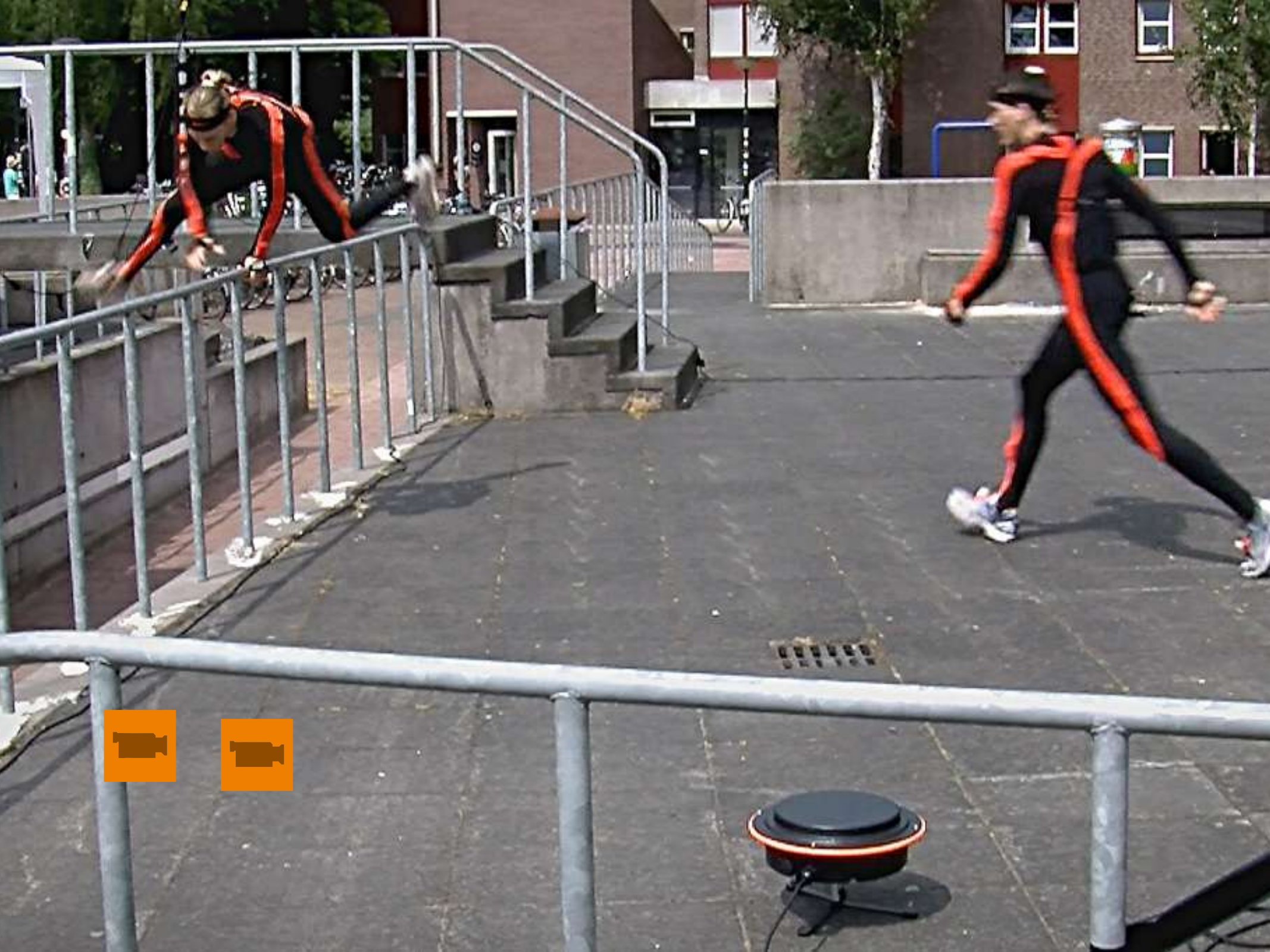


Receiver
(Integrated transmitter)



Transmitter







MVN

"ALICE IN WONDERLAND" BTS: Crispin Glover (second from left), Helena Bonham Carter, Tim Burton, Mia Wasikowska Ph: Leah Gallo ©Disney Enterprises Inc. All Rights Reserved.

MVN



MTw – wireless motion tracker



- Awinda™ wireless protocol
 - Time sync within 10 us
 - 802.15.4 ISM 2.4 GHz based
 - Up to 32 devices in body area network
 - 30 m range
- 3D gyro, accelerometer, magnetometer, barometer
- 3D orientation, real-time
- Smallest and most accurate Xsens unit ever



Thank you!



www.xsens.com



MIRA
UNIVERSITY OF TWENTE.

