XBUS KIT

AMBULATORY MEASUREMENT OF HUMAN MOTION

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The Xbus Kit is a lightweight, portable system that incorporates the Xbus Master and up to 10 Motion Trackers (MTx), enabling ambulatory measurement of human motion. Controlled and powered by the Xbus Master, MTx's provide drift-free 3D orientation, 3D acceleration, 3D rate of turn (rate gyro) and 3D earth-magnetic field. The Xbus Master samples and sends digital data from the MTx units, wirelessly or via a serial cable, to a PC, where data is recorded using MT Manager or the MT Software Development Kit (SDK).

PRODUCT OVERVIEW

Features

- The Xbus Master connects multiple Motion Trackers (MTx) on one or two Xbus strings
- Synchronous sampling of multiple MTx's at adjustable sample frequencies up to 512Hz
- Compatible with PC via USB cable or wireless Bluetooth 2.0 connection
- Compatible with Xsens MT Manager and MT Software Development Kit
- External triggering & notification of trigger moment available for synchronization
- Battery operated or mains power supply
- Low battery indicator
- Internal 64 kByte communication buffer
- Supplies power to MTx's
- Ergonomic design

Fields of use

- Biomechanics
- Rehabilitation
- Sports science
- Virtual reality
- Ergonomics
- Animation

The Xbus Kit combines a set of MTx's, an Xbus Master and a wireless transceiver enabling completely ambulatory measurement of human motion. The MTx's provide drift-free 3D orientation as well as: 3D acceleration, 3D rate of turn (rate gyro) and 3D earth-magnetic field. The Xbus Master samples and sends synchronous MTx data to the PC. Xsens' MT Software and SDK are Xbus Master compatible.

Bluetooth™

TECHNICAL SPECIFICATIONS XBUS MASTER

Type

Product code	XM-B-XB3

Xbus

Max. number of MTx's	10 (20 with 2 synchronized Xbus Masters)
Type of MTx's	MTx Xbus version (MTx-49A##G##) (See MTx brochure for Technical specifications)
Sample frequency	Adjustable from 10-512 Hz (max. depends on number of MTx's used)
Sample frequency example configuration	150 Hz (5x MTx, raw data output, Bluetooth mode)
Number of Xbus connectors on Xbus Master	2 (enables 2 Xbus strings)

Host interface

Cable type	RS-232, USB
Wireless type	Bluetooth v2.0 (Serial Port Profile)
Typical range radio	100 m (Max. output power 100 mW)

Power

Operating voltage	4.5 - 12 V
Power	2.7 W (5x MTx, Bluetooth mode)
Batteries	4x AA 2700 mAh, rechargeable NiMH (included)
Minimum battery powered operating time	3 hr (5x MTx, Bluetooth mode)
Power Adapter (EU, UK, US)	12 V DC 1A

Physical specifications

Dimensions	10 x 15 x 4 cm (W x L x H)
Weight (incl 4x AA batteries)	330 g (200 g excl. batteries)

Xbus Kit

The Xbus Kit contains:

- Xbus Master
- 5 MTx's (also available in other quantities)
- MT Manager and Software Development Kit
- Accessories:
  - 5 Xbus Cables
  - Xbus Master Cable USB
  - Power Adapter
  - 4 AA Rechargeable Batteries
  - Belt
  - Bluetooth Transceiver USB
  - Suitcase

Optional

MVN STRAPS (for easy sensor fixation)

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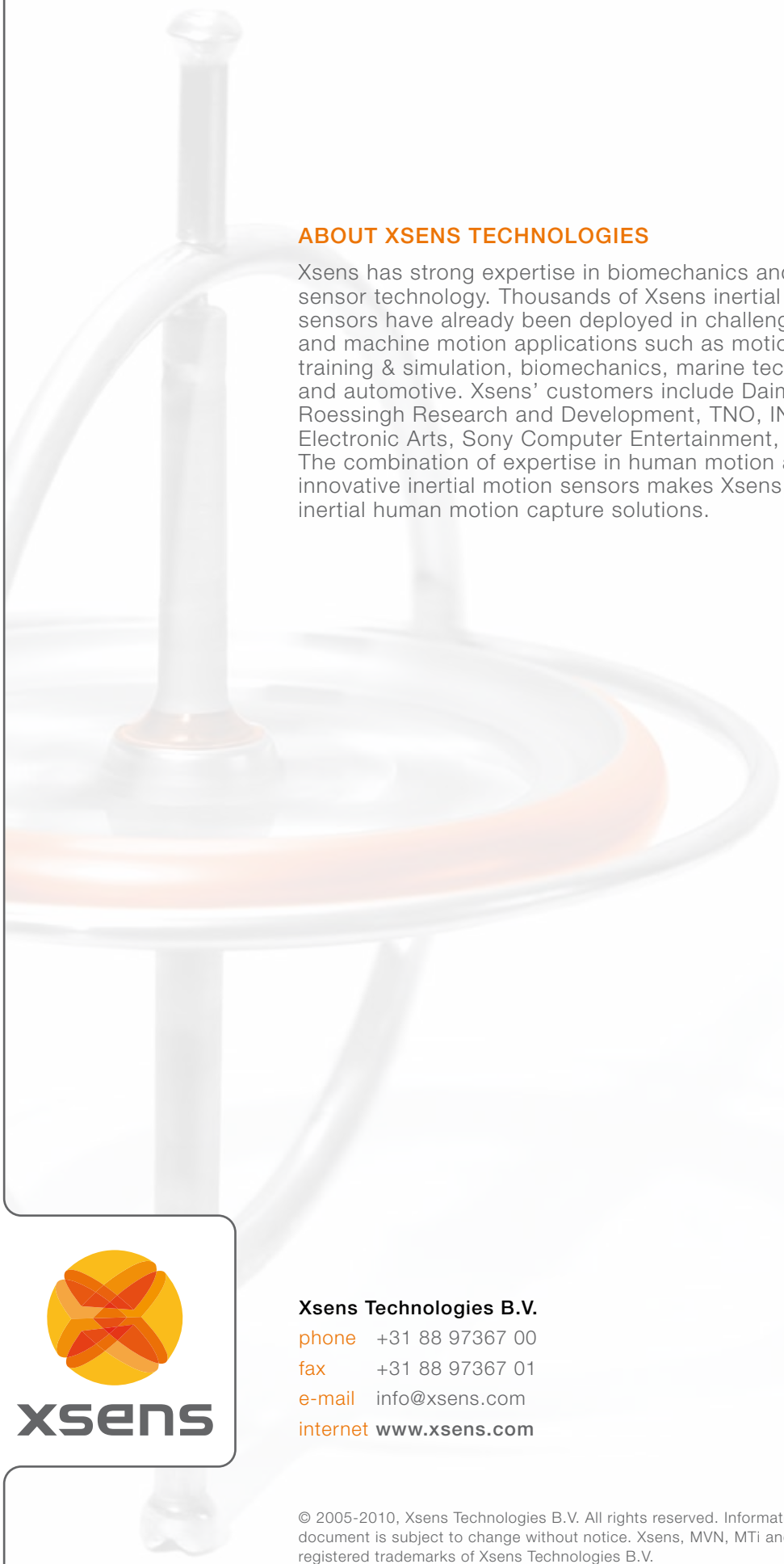

ABOUT XSENS TECHNOLOGIES

Xsens has strong expertise in biomechanics and inertial sensor technology. Thousands of Xsens inertial motion sensors have already been deployed in challenging human and machine motion applications such as motion capture, training & simulation, biomechanics, marine technology and automotive. Xsens' customers include Daimler, Össur, Roessingh Research and Development, TNO, INAIL, Electronic Arts, Sony Computer Entertainment, and others. The combination of expertise in human motion analysis and innovative inertial motion sensors makes Xsens a leader in inertial human motion capture solutions.

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