

3D-BIRD™

Real-Time Orientation Tracking



3D-BIRD tracker seen above mounted on Sony LDI-100 head mounted display. Audi TT Coupe virtual interior and exterior environment provided by Eon Reality, Sweden

Step inside and take a virtual ride... *with a Sourceless 3D Motion Tracker from Ascension!*

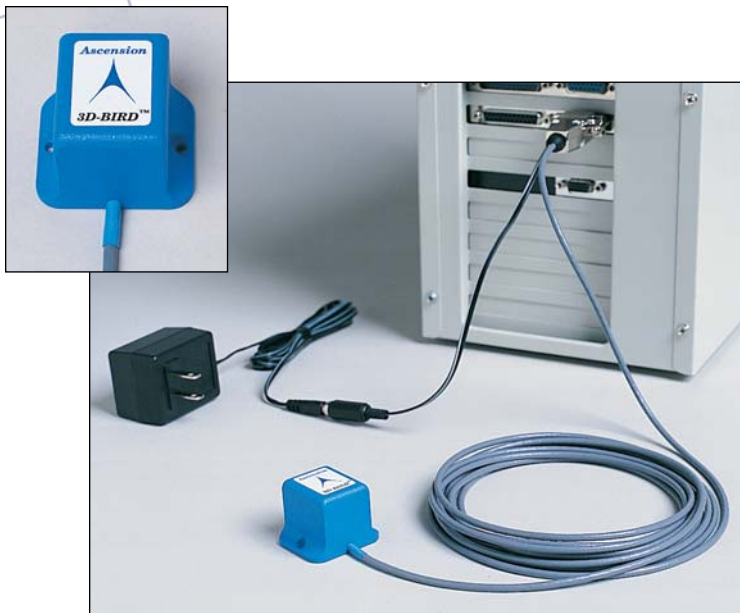
- **Instant orientation tracking** for virtual reality viewing and real-time simulation.
- **"Sourceless" means no magnetic transmitter** – unlimited range and virtually no metallic interference.
- **All attitude** – full angular tracking. No limits in head-pointing coverage.
- **No electronics unit.** Sensor plugs directly into your computer's RS-232 port. Easy interface and integration with fast data throughput.

Stable. Precise. Small. Fast.
New from the Motion-Tracking Leader.

 **Ascension**
Technology Corporation

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3D-BIRD, shown with its power supply, connects directly to the RS-232 serial port of your host computer. Sensor data is processed by our driver residing on your computer.

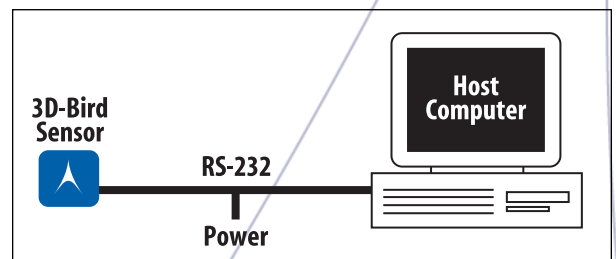
Sourceless Orientation Tracking.

Ascension, the pioneering leader in motion tracking technology introduces **3D-BIRD**. It delivers smooth tracking of orientation angles without range limitation or line-of-sight restrictions. Since there is no magnetic transmitter, metallic interference is virtually eliminated.

Whatever you are tracking, **3D-BIRD** lets you move up, down, side to side, and rotate (yaw, pitch and roll) without ever losing coverage.

Fast and Stable.

3D-BIRD makes up to 160 measurements per second to keep you in sync – no matter how fast you move. That means no noticeable lag to disrupt the action or make you queasy in head-tracking applications. Our newly patented and unique tracking technology accurately tracks motion for virtual and real-time simulation applications.



Simple to Use Interface.

3D-BIRD uses your computer to process its computations. No electronics unit means a simplified, more robust configuration at a lower cost. Use our software driver to collect and format outputs for your application. Update our software directly from the Internet. No need to change EEPROMS or return the tracker to Ascension for software upgrades.

OEM Configurations.

For system integrators (OEMs), we'll lay-out our small lightweight sensor to meet your requirements. Whatever your configuration, you get precise 3 degrees-of-freedom (3DOF) tracking at a cost-effective price.



Specifications

TECHNICAL

Degrees of Freedom:	3 (Orientation)
Angular Range:	All attitude ($\pm 180^\circ$ yaw, $\pm 90^\circ$ pitch, $\pm 180^\circ$ roll)
Angular Accuracy:	Static Accuracy 2.5° RMS; Dynamic Accuracy 4° RMS
Angular Resolution:	0.2°
Update Rate:	Up to 160 measurements/second
Maximum # Sensors:	1 per serial port
Maximum Angular Coverage:	1000° per second
Computer Interface:	Connects to RS-232 port of your host computer
Dynamic Lag:	15 milliseconds at 360°/second

PHYSICAL

Power:	5VDC @ 100mA. Power supply included
Sensor Size (L x W x H):	1.34" x 1.08" x 1.0"
Sensor Weight:	1.0 oz
Sensor Cable:	15', extendable to 30'



CERTIFIED
ISO 9001

Call: **800-321-6596**

Outside N. America: **802-893-6657**

Visit our web site at: **www.ascension-tech.com**

e-mail: **ascension@ascension-tech.com** Fax: 802-893-6659

PO Box 527, Burlington, VT 05402 USA