Fitness Assessment

Orbiter’s Assessment Timing system is just what your military, police, or government unit needs to make your test successful. It uses radio frequency identification (RFID) tags to keep track of participants. The Orbiter registers each lap and split time as the tag passes an Orbiter detector in the microwave or UHF radio band. It is a complete system with everything you need including 65 wrist / ankle transponders and straps.

Used by 93 Federal Agency contracts and and growing. Our equipment has reported to work for over 8 years trouble free. It is very rugged, may be dropped, and used in the rain without cover, snow and desert environments.

The mobile detectors only take 3 minutes to set up and can be rolled immediately after a Start to a separate Finish line. Systems maybe permanently installed outdoors or indoors. Assessment managers like the immediate set up feature and it is important for venues that allow a limited time to set up. Connect two for wireless runner turn around way point detection.

Easy-to-use software allowing quick back to back tests. Configure your course anyway you can imagine such as out and back, loop track, segment times on obstacle courses. Start your test with by Gun (Mass Start) or by Chip (Individually). Timing results may be viewed in direct sunlight on a Panasonic Tough tablet in real time wirelessly.

The mobile system is delivered as a complete system out-of-the-box, the software installs easily and tag registration is a breeze by roster number or name. Simply place the orange detector at the Start/Finish line, power up and you are ready to go. No power cords are needed, as each Spire detector has 8 hours of battery-power. Permanent tack side systems with 120 v power.

Call for a free software demo download.
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A built in Battery power level indicator (Green – Yellow – Red) is standard.  This allows plenty of time to plan ahead for recharging the units.  Batteries may be recharged while the unit is in use.

Choice of Microwave for permanent or UHF 3D passive tags are used.  Bibs or tags affixed to the ankle or wrist using a strap may be used.  The bollards may be set to "last tag detect" seen or "first tag" detect seen depending on the fitness directors preference.  The distance tags may be detected from the detector may also be controlled.  This is done through Orbiter’s Phase Detection postioning technology.

An internal clock keeps time within each bollard.  These are synchronized and according to US Military testing are 1/100th seconds accurate and do not drift during the test period (30 days).  The clocks automatically synchronize with the scoring computer each time they come in contact.  The Watch Dog software inside the detectors send Heart Beat messages to the scoring computer signifying all is well.

System operates in logging mode (without a live connection to a tablet / laptop) or in real time mode with a connection.  A copy of your test is always retained inside the detector so even if your tablet / laptop is broken your test results are safe.

For Purchasing:  When writing specifications:  (1) No antenna cables plastic or folded mats laid onto the track, (2) No Pelican box or separate time detection controller allowed.  (3) No Lithium Ion Batteries allowed.  (4) Software must have "Reprocessing" and "Clone" features.  (5) No volatile memory allowed.  (6) For permanent installations no trenching into track, and ability to detect runners time precisely on on both inside lane and outside lane of the track.  (7) Min. tag life, no re-charge for 5 years.  Tag guaranteed for 5 years without additional charge.

Rational:  (1) Safety trip hazard & reduced set up work.  (2) Obsolete & heavy (3) Fire / Explosion Hazard (4) Ability to change configuration after the fact in case of set up error. Quick back to back testing.  (5) Saves data if power fails.  (6) Increases track life.  (7) Lowers costs less work as batteries do not need to be replaced.

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Never Lose a Test:

- When the detector "beeps" 100% your test is safe.  This is because only Orbiter has all of these Features:

  - Reprocessing & Cloning.
  - FIFO saved data.
  - Non-volatile memory.
  - Your computer does not need a live connection to the Orbiter Detector.
  - Weather system, track-side LED, & photo finish included.

Detailed Features:

Weather-proof, cold-temperature design:
-20 degrees F on battery, -30 degrees on AC if started above -20 degrees F.

Detect range: UHF 26 ft.  Microwave 60 feet (Spans an entire track and times accurately all 8 lanes.)

Color:  Orange – graffiti and UV tolerant.

Weight: 28 lbs.

Size: (excluding base) 48”X12”X 11”

Portocal:  Polyurethane ball-bearing wheels.

Power:  LED strobe and variable volume alert

Weather System records track side LED temp, humidity, wind speed.

Orbiter uses safe AGM batteries approved for airline travel.