

PRECISION SCORING

TDCue[®] AUTOMATIC TARGET SCORING SYSTEM

FEATURES

- Precision non-contact hit sensor
- Real-time impact location display
- Proven impact location accuracy
- 5mm accuracy at center of target
- 900 MHz wireless RF data
- 24-hour, all-weather operation
- Environmentally hardened
- Self-diagnostic with built-in-test

SYSTEM DESCRIPTION

TDCue is a fully capable, proven, non-contact hit sensor target scoring system based on acoustic technology. The TDCue system detects supersonic projectiles and determines where the target is hit, providing instantaneous feedback to the shooter. AAI is the holder of the U.S. and international patents that control this technology.

TDCue is adaptable to both stationary and moving target lifters or can be used as a stand-alone device. The system can be hard wired or radio controlled, which allows it to be moved from location to location and set up within minutes.

The TDCue individual target bar is part of a family of sensors produced in a variety of sizes to accommodate test range needs from rifle marksmanship to tank gunnery training.



HOW TDCue WORKS

TDCue uses simple, rugged hardware designs combined with military-qualified commercial-off-the-shelf (COTS) equipment to create a reliable, low-cost target scoring system.

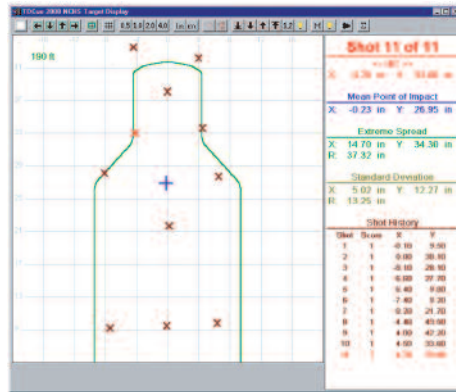
TDCue incorporates AAI's patented design that uses three piezoelectric transducers. Each transducer registers the arrival time of the supersonic shock wave, allowing computation of the projectile trajectory direction. The processor combines

information from the sensors to compute the trajectory, projectile velocity, and type of projectile. That information is displayed on a fire point computer at the shooter's location, providing instant feedback.

Data can be displayed or stored at the range control station. Muzzle blast detectors at the firing point allow accountability for all shots and ensure that shots from adjacent lanes are omitted.



TDCue non-contact hit sensor system, with E-type silhouette



Display showing hit locations, mean point of impact, and statistical data



Fire point computer and muzzle blast detector



ADDED FEATURES

- Target bar with patented sensor units
- Compact sensor unit
- 3 piezoelectric transducers per sensor
- Available in variety of sizes
- Data display system
- Programmable detection zone around target
- Muzzle blast detector
- 900 MHz frequency hopping wireless RF data link from bar to display
- Ethernet, RS422, RS232, and RS485 compatible

BENEFITS

- Non-contact hit sensor provides low cost, precision marksmanship training, scoring or weapons effectiveness evaluation
- Easily placed in safe locations, can work with a variety of target lifters
- High frequency transducers produce precise and accurate scoring
- Ranges from 2-foot bar for rifle marksmanship up through 10-foot bar for tank gunnery training
- Provides immediate feedback to both shooter and range control. Displays data on latest shot, statistics, and graphical locations.
- Allows scoring of missed shots within lane and ignores shots in adjacent lanes
- Ensures unambiguous determination that shot originated from test lane and accounts for any misses outside of the sensor's detection range
- For use at remote locations and quick set up
- Adaptable to different communications software

For more information, e-mail us at aaireg@aaicorp.com or call 1-800-655-2616.



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